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DEGREE FOR WHICH THESIS WAS PRESENTED Master of Education
YEAR THIS DEGREE GRANTED 1981

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SET AND MULTILINGUAL SPEECH ACQUISITION

by



IRENE ARKI

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1981

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Set and Multilingual Speech Acquisition submitted by Irene Arki in partial fulfillment of the requirements for the degree of Master of Education.

ABSTRACT

The purpose of this study was to offer a comprehensive model capable of accounting for and interpreting the acquisition of multilingual speech and language interaction in early childhood, based on Uznadze's (1966) theory of set, Imedadze's (1967) application of set theory to child bilingual language development, and my extension of Imedadze's application.

The model recognizes set as the basis for the emergence of speech and the determining influence over the development of language, and establishes the dynamic evolution of speech acquisition as a gradual process. There exists, at first, a common pool of mixed speech from which all utterances are drawn, followed by a stage in which languages intersect, until a stage of differentiation occurs in which separate language sets emerge.

I agree with Imedadze's (1967) notion, based on the building block, set, that from a stage of mixed speech evolves one set for each language, consisting of two levels: a non speech and speech level. However, after applying Imedadze to child multilingual speech acquisition, I found that the speech component of each language set is divided into active and passive knowledge. The active knowledge eventually functions autonomously within its own language set, whereas passive knowledge is and remains contained in an underlying set which intersects with all language sets at the level of their speech component.

Through this underlying set it is possible to locate the situs of reception of language stimuli and better explain Imedadze's (1967) notion of alternative actualization of language sets.

The workability of my model was examined through observation and interpretation of the speech acquisition of my son from age two years to two years, three months, being raised in a unique multilingual environment.

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CHAPTER I

INTRODUCTION

Overview of the Problem

Language is essential in our behavior; language is a system in which words have meaning, relations bind words, and words are tools to convey meanings. Psychological investigations of the dynamics of language gained strong recognition and support over the past century. The acquisition of speech in young children is a complex problem. Theoretical concepts can help better our knowledge of how and why speech emerges and help place facts in order as to the relation among words.

There exist theories of child language learning which have directed attention to the question of the nature of language and thought and its influence on development (Piaget, 1950, 1967; Vygotsky, 1962), and a wealth of information on child speech acquisition (Bruner, 1966; Luria, 1959, 1961; Werner and Kaplan, 1963).

Research has also recognized that bilingual speech acquisition in early childhood deserves to be observed and studied and can yield additional insight to the question of language learning (Leopold, 1939-1949; Pavlovitch, 1920; Ronjat, 1913). Studies examining such speech acquisition are, however, often conducted in the absence of theoretical guidelines, and only concentrate on certain aspects of such acquisition. Facts are as yet unassimilated into a comprehensive theoretical framework because we lack a comprehensive principle for organizing the information gathered from such studies. Nevertheless, the various elements studied all have an important place in the total picture of child language learning.

One area which holds promise of furthering our understanding of the general problems of speech, and in which little attention has been received in the way of observational child studies, is the specific case of multilingual speech acquisition. There have emerged few psychological models by which the principles governing this type of speech acquisition can be comprehensively examined.

A theory of human development which offers a means by which to address the question of the principles governing multilingual speech acquisition in early childhood is Uznadze's (1966) theory of set. Set is a basic psychological category: set is a preconscious state, arising on the basis of a need, a situation for its satisfaction, and basic perception, modified by mental properties and functions which determine the purposeful direction of behavior. Set theory takes into account and integrates in a holistic fashion the complex interactions of developmental components of psychological phenomena with respect to language and cognition. The concept of set appears applicable in integrating the various aspects of multilingual speech acquisition and useful as an interpretive tool, and thus affords a fresh outlook on such activity.

A model which offers a means by which to comprehensively examine the interaction of languages is that of Imedadze (1967). She adopted the notion of set and adapted it to the question of infant bilingualism, maintaining that the emergence of speech is determined by a need and an occurrence for satisfying the particular need, and that a set consisting of non speech and speech components exists for each individual language, the interactions of which govern the development of languages.

It will be seen how the theory of set and Imedadze's application of set theory offer a rational and cohesive psychological model upon which an expansion can be made to better account for and interpret the acquisition of multilingual speech.

Importance of the Problem

The study of child language cannot be emphasized strongly enough in the field of psychology. It is generally accepted by cognitive psychologists that language is a means of communication and cultural and societal understanding. Language is a tool for thought, a tool that not only follows cognitive activity and thought processes, but, too, determines their development. Language is the means by which the child can hope to create abstract cognitive spheres. Studies of multilingual language development can help better our understanding of child language by providing additional evidence as to the nature of its emergence and the dynamics of its structure.

Research has disclosed its strengths and its weaknesses in examining child speech acquisition. Communication reflects the state of the child as a whole. The child must be observed within the multi-dimensional context of behavior, and all aspects of his/her speech activity must be examined within a holistic framework. Observational studies tracing multilingual speech acquisition on the basis of more comprehensive means are necessary and invaluable in bringing supplementary data to test and apply existing investigations for both theoretical and practical purposes. Observations of children at different ages and stages of development on a large scale and cross-culturally, with the aim of discovering the principles that govern the interaction

of languages, would increase our chances of extending our knowledge of language development and perhaps securing some generalizations.

Statement of Purpose

The purpose of this study is to offer a more comprehensive model capable of accounting for and interpreting the acquisition of multilingual speech and language interaction in early childhood. The model is based on Uznadze's (1966) concept of set, Imedadze's (1967) application of set theory to child bilingualism, and my extension of such application. The model recognizes set as the basis for the emergence of speech and the determining influence over the development of language. The applicability of set as an interpretive tool and the workability of the model will be examined through an analysis of the speech acquisition of my son from age two years to two years, three months being raised in a unique multilingual context.

Limitations of the Study

An application and extension of the concept of set is but a promising means by which to study emerging multilingualism more comprehensively, and is exploratory in nature. The primary concern of this study is psychological, to see if set is useful in interpreting the phenomena of multilingual speech acquisition. The study is limited in scope in that only one child is observed at one stage of development, and the findings restricted in that the observation is limited to a three month period, specific times of the day, and the number of hours. Although a single observational case study appears limited in many

respects, it is my contention that it may provide as much, if not more, meaningful information than that obtained from other types of investigations. The workability of the model presented can be rightly examined with respect to all its components if it is subsequently applied to observations of speech acquisition of many children, over longer periods of time through the different stages of development.

Outline of the Thesis

The present study will provide a theoretical review of language development and investigations of child bilingualism and multilingualism. A summary of the theory of set and its application to language development will be presented, and explanation will be given as to how the principles governing multilingual speech acquisition can be better addressed when additional possibilities are analyzed on the basis of an expansion of the notion of set. The methodology of the observational study will be explained, and an analysis of major findings of the observation of the speech acquisition of my son shall be made using set as an interpretive tool.

Glossary of Terms

1. One person - one language is the principle according to which each parent or person addresses a child in one language exclusively.
2. Undifferentiated speech implies mixed speech, a combination of all means available to a child for communication.
3. The mixed stage of speech is the stage at which languages are processed as a single system.

4. Differentiated speech and differentiation of languages refers to the active separation and operation of linguistic codes. Mixing, interference, and confusion are words which are often ascribed a synonymous negative meaning. This writer contends that mixing is but a fusion, a combination of all means available to a child for communication; mixing, thus, is undifferentiated speech, whereas confusion implies lateral interference of differentiated speech.
5. Alternate autonomous functioning of languages is the alternate actualization and active operation of independent language codes.
6. Speech components of a language refer to the structure of a language, meanings and their vocal verbal shells.
7. Non speech components of a language refer to persons, places, and situations connected with a language.
8. A child's active knowledge of a language is speech in its active verbal form.
9. A child's passive knowledge of a language is the understanding of speech, its meanings.
10. Multiple fixation is reinforcement of language stimuli of one language through the use of another.
11. Set is a preconscious state, arising on the basis of a need and a situation for its satisfaction, which determines the purposeful use of a particular language.

CHAPTER II

A THEORETICAL REVIEW

Three prominent theories of human development will be reviewed in this chapter. Empirical investigations of child bilingualism and multilingualism relating to methods by which language development can be examined will be analyzed. The strengths and weaknesses of these theories and investigations will be reviewed to assist in the establishment of an appropriate theoretical framework within which child multilingualism can be examined.

Language Development

The importance of language in human development has resulted in research being conducted into the complex process by which language gains its meaning. The type of organizational systems attributed to human development rests upon particular assumptions as to the nature of consciousness. The role and the degree of significance attributed to language determines the way it is interpreted.

Language is meaning. The ability to create symbols and use language is what distinguishes human mental activity from animals. Language is a means by which we represent and interpret reality. Language is thus an expression of our very nature.

The human being is governed by the tendency to actualize individual capacities. The drive for self-actualization is the need to come to terms with oneself and one's environment, to achieve optimal performance. Language plays an important role in development because it is the means

by which an individual can hope to assume abstract attitude and to organize the world in a conceptual way.

The psychological development of the human being from birth reflects the way an individual perceives, experiences, and organizes the world. The extent to which an individual relates to the world is guided by language. Attempts to clarify questions as to the origin and function of language are essential in gaining a better understanding of an individual's total development. The commencement of such understanding is with the child's language development.

The complex problem of child language development is a subject of much concern. It is generally accepted by theories of language development that the individual is an active perpetrator of activity and change, that the role of the individual is to attain contemplative activity, and that language evolves within a dynamic context and plays an important role in development. However, the nature of language is viewed differently according to particular theoretical frameworks. The contention that language emerges as a maturational process, and the contention that language emerges as a social process represent two opposing positions in defining the origin of language. The role of language in the cognitive process is also viewed differently according to particular theoretical orientations. The view that language is determined and structured by thought, and the view that language determines thought development are two diverse interpretations of the function of language.

It is my contention that the maturational approach makes too many idealistic assumptions as to the origin and function of language. Studying language as a maturational process focuses too heavily on the genetic emergence of language and self-generative processes. To accept that language grows out of biological functioning is to reject the important socializing role environment plays in development. To accept that language does not play a leading role in cognition is to accept language as one symbolic function among many. The maturational approach appears inadequate in explaining the emergence of new functions. It does not place enough emphasis on the individual as a changer and creator of new forms of existence.

This writer sees language as the highest expression of human psychological organization, that is, as the supreme symbolic function, and thus has determined that the question of how speech emerges in the child and what processes underlie its acquisition can best be investigated within a framework that recognizes the evolution of language as a social process and the important role of language in cognitive development. In observing child speech one cannot deny that language is learned in a social context and reflects historical and cultural aspects of a given society. Language determines the kinds of external stimuli available to a child and defines intellectual development.

Piaget and Vygotsky. The view that the individual is an active agent in his relationship with the environment, and the thesis that the role of the individual is to attain contemplative activity is shared by the theories of Piaget (1950, 1967, 1969, 1970, 1972) and Vygotsky

(1935, 1962, 1966). The similarity between their theories is the contention that development is a dialectical process proceeding in stages from physical responses to and mental activity about external stimuli to contemplative activity.

A dynamic model of behavior rightly recognizes that development does not evolve on the basis of external stimuli alone. The contention that development is a dialectical process recognizes that there is more to development than observable quantitative growth as a result of environmental stimuli.

The difference between the theories of Piaget and Vygotsky occurs in the frameworks from which they view activity. Piaget (1950, 1967) defines activity within a genetic-epistemological context, and Vygotsky (1962) a socio-historical one. Piaget emphasizes the action of the organism as being the primary source of interaction, whereas Vygotsky emphasizes both the organism and the social historical environment, and the individual as being the synthetic causes of psychological phenomena. Their shared contention that development is a dialectical process is thus similar by analogy only.

Assumptions concerning development are not only based on psychological grounds, but philosophical and cultural as well. Piaget's (1950, 1967) assumptions are rooted in his biological background. He views development as a predetermined unfolding of biological structures directed by an innate process. The assumptions underlying Vygotsky's (1962) theory are rooted in materialist science. He sees development as being contingent upon the social-cultural environment of the individual. Vygotsky's assumptions are in accordance with the principle of dialectical

materialism which emphasizes firstly, the individual's disruption of equilibrium and the environment through self-generated actions, and secondly, matter organized in a certain way (the brain) as the basis for mental activity, and society and history as determining such activity.

Both the psycho-idealist approach and the psycho-materialist approach to development have much theoretical support. That psychological development is a natural, maturational process that proceeds from biological givings to sensorimotor acts to contemplative activity, and is directed by an innate process is supported by Werner (1948, 1957). That, in autogenesis, development is a social process is supported by the works of Luria (1959, 1961) which reject the notion that the nature of mental processes can be interpreted as being rooted in inherent properties of mental life. A socio-historical complex is better applicable in studying development in that it better accounts for the kinds of external stimuli that act on the individual in his interaction with the social environment.

The thesis that the role of the individual is to attain contemplative activity recognizes that language is an important factor in attaining a higher form of intelligence. The degree of significance placed on the role of language in cognition clearly distinguishes the theories of Piaget and Vygotsky. The Piagetian framework views language as being determined and structured by thought (Piaget and Inhelder, 1969). For Piaget, language is but one symbolic function among many. Like other symbols, it is part of the semiotic function and represents a state of knowing. Language is distinguished from operational thought because

language cannot explain its development. The roots of logical structures are found in the same coordination of actions prior to the development of language. The processes of the evolution of intellectual capacity are predetermined biologically and developmentally. All knowledge prior to language is "given" in the beginning. Thus, the idea that thought can be accounted for by any one particular factor in the development of the child is rejected by Piaget. Language or social life are not sufficient in explaining the transition from sensorimotor behavior to conceptualized actions. Language or social life are only possible because of preverbal intelligence and interiorization of imitations (Piaget, 1972). Piaget does, however, acknowledge that as language continues to develop, it does encourage cognition.

In contrast, Vygotsky (1962) sees language as determining thought development. He emphasizes the social origins of language. Language is a tool which takes on socially mediated forms such as words, images, drawings, habits, and skills. Religion, math, and science make use of these forms. Vygotsky (1962) formulated that if altering nature can be considered a new type of behavior, then it follows that there must also be a new principle governing this behavior: speech. Speech is the main means of communication which determines behavior in a social context (Vygotsky, 1966). As Pavlov stated, "the word is connected with all the external and internal stimuli reaching the cerebral hemispheres, it signals them all, replaces all of them and may therefore evoke all the actions and reactions of the organism conditioned by these stimuli" (in Leontiev, 1966, p. 30). The significance of language as a socially mediated process lies in its influential role in cognition. For Vygotsky

(1962) cognizing is learned from others through this form of mediation.

Vygotsky (in Leontiev, 1966, p. 44) formulates three main stages of speech. First, the word must have meaning (a relation to a thing). Second, this connection between the word and its meaning must be functionally utilized by the adult as a means of communication with the child. Third, the word and its meaning must then be assimilated by the child. Vygotsky (1962) distinguishes inner speech from external speech. Inner speech is thought through meanings. "Word meaning" which is both verbal and intellectual is Vygotsky's unit of analysis. Internalization of speech determines the development of logical thought.

Language as a social mediating process playing a leading role in development and the three functions of speech as formulated by Vygotsky appear more applicable in interpreting the dynamics of language than the contentions of Piaget. There is much theoretical and empirical support for the notion that speech and verbal thought are the movers of activity (Luria, 1961) and determine cognitive processes (Bruner, 1966). Luria sees "the word" as being a most important factor in forming mental activity "perfecting the reflection of reality and creating new forms of attention of memory and imagination, of thought and action" (Luria and Yudovich, 1959, p. 23). Bruner (1966), like Vygotsky, places great emphasis on language as being a social factor accounting for the development of thought.

These two theories differ from each other in interpreting speech acquisition by their positions on the function of egocentric speech. Vygotsky (1962) sees egocentric speech as being the transitional stage in the evolution from vocal to inner speech, that is, a transition from

the social activity of the child to a more individualized activity. It arises when the child begins conversing with himself. Internal speech, which is egocentric in character, serves both autistic and logical functions. Piaget (1952) sees egocentrism as being the transitional stage between "autism" and "socialized" thought. Autism is the earliest form of thought, and socialized speech is relatively late according to Piaget. Vygotsky, in contrast, sees egocentric speech as being important because of its functional role. It becomes an instrument in seeking and planning the solution of a problem. "It's function is to aid the child in orienting himself in his conscious understanding and behavioral activity" (Langer, 1969, p. 84). If one supports the idea that language plays a significant role in cognition, then the notion that egocentric speech is an influential factor in thinking processes must also be recognized.

In summary, it would appear that the theories of Piaget and Vygotsky could account for the effect speech acquisition has on the overall development of the child. However, a close examination reveals that neither theory is comprehensively developed to examine the principles governing such acquisition through all stages. Their units of examination are primarily directed at examining the nature of language and thought in its long term development. Also, although mental activity is explained by both theories through their investigations of language and cognition within a dynamic context, their studies of developmental phenomena place greater emphasis on individual acts than on the individual as a whole. Neither theory places sufficient emphasis on social-psychological and personality variables.

In extending research to study the specific case of multilingual speech acquisition, neither theory could be applied to study such acquisition adequately. Other than acknowledging the importance of multilingual speech acquisition on development, Vygotsky has not pursued any investigation into this area. Piaget has not considered the question. It is difficult to relate multilingualism to the psychological systematization of languages and to determine how such systematization might influence the interaction of languages in particular stages of development on the basis of either theory. The units of analysis utilized by Piaget and Vygotsky do not lend themselves easily to investigating specific fragments of language phenomena within a holistic framework. Lastly, their study of psychological phenomena as conscious acts may not be the only way to interpret behavior, more specifically, child speech. It will be seen how Uznadze's (1966) theory of set offers a means more compatible with studying multilingual speech acquisition.

Child Bilingualism and Multilingualism

Theoretical investigations of the evolution of language within a dynamic context, and recognition that speech acquisition deserves attention has resulted in research which studies the problem of child bilingualism and multilingualism. An examination of existing investigations helps place proper perspective on the type of models needed to better analyze the questions that concern us.

The following review of prominent empirical studies of child bilingualism and multilingualism includes primarily observational studies and several investigations based on interviews, experiments, or on the works of others.

Fragmentary Investigations. There exist investigations which examine only elements of the whole, and which often lack a theoretical framework for their interpretations and conclusions or proceed from an unacceptable one. Models capable of adequately addressing the question of the interaction of languages are neither offered nor could they be rightly constructed. Such investigations are, however, beneficial in that they broaden our understanding of the different elements.

There are studies which only examine the influence of one language on another. In support of the positive influence of one language on another and the benefits of acquiring languages according to the one person - one language principle are the studies of Ianco-Worall (1972), Perren (1972), Smith (1935), and Totten (1960). In support of what has been termed the negative influence of one language on another, the mixing, interference, and confusion their interaction may create are the studies of Burling (1959), Celce-Murcia (1978), Engel, Walburga von Raffler (1965), Itoh and Hatch (1978), Murrell (1966, one of the few multilingual studies), Oksaar (1970), Ruke-Dravina (1965, 1967), Swain (1974), Tabouret-Keller (1962), and Zareba (1953). These authors mistakenly assign the same meaning to the terms mixing, interference, and confusion, or use these words interchangeably. I support the position according to which mixing is a first stage of speech acquisition and

quite independent of any possible confusion or interference of one language on another. Mixing is but a fusion, a combination of all means available to a child for communication. Mixing, thus, is undifferentiated speech, whereas confusion implies lateral interference of differentiated speech.

From these studies a few main factors seem to be prevalent in explaining mixing in the speech development of young children acquiring two or more languages: the existence of a dominant language; knowledge of some vocabulary in only one language; similarity of words in both languages; choice of simplest utterances; ease of inflection; the tendency to retain in a language, in preference to another, what was first learned in that language; and the availability of some words over their counterparts. It can be deducted, also, that perhaps the substantial amount of mixing in the speech of the majority of the children in these particular studies was due primarily to parents' indiscriminate use of languages, that is, there was no strict language separation by the parents in speaking to their children. Such observations deserve additional and more comprehensive analyses.

The negative influence of one language on another and the disadvantages of multilingualism with regard to the command of the native language and the intellectual development of a child is also supported by Epstein (1918). He views multilingualism as an obstacle to thought, a complex interaction of languages in which arises antagonism of words and ideas among language systems, and in which competition leads to associative inhibition, interference, or confusion (in Vygotsky, 1935). As discussed by Vygotsky (1935), Epstein's research proceeded from an

unacceptable theoretical premise "that the psychological basis for language is the process of associative ties established between a body of sound units and the corresponding meaning," which defines multilingualism as "two and more identical associative ties between one meaning and its various sound designations in the two or more language systems" (p. 53). With respect to the development of several languages Epstein determined "that two or more language systems can exist simultaneously as more or less autonomous systems without entering into a direct tie with one another, but still showing associative inhibition against each other: (in Vygotsky, 1935, p. 54). The interaction of languages certainly cannot be rightly examined on the basis of associationist psychology.

Other studies focus their attention on the fact that initial mixing occurs in bilinguals, decreasing with the degree of differentiation of the languages: Geissler (1938); Mikes and Vlahovic (1966); Padilla and Liebman (1975); Redlinger and Park (1980); Smith (1935); Swain and Wesche (1975); and Totten (1960).

Some research has examined prevalent factors in evoking the use in children of one language rather than the other. Meertens' (1959) research suggests that language is associated with location, and perhaps situation. Elwert (1960) and Mitchell (1954) noted that different languages are associated with different people and age groups. Oksaar (1970) and Ruke-Dravina (1965, 1967) found that language switching is associated with situation.

Investigations of a More Exploratory Nature.

Early studies: Some studies are more exploratory and more detailed than the abovementioned studies. They have observed and

examined a wider range of elements in language development. However, they are similar in that they have arrived at their conclusions in the absence of any theoretical guidelines in analyzing such development. The observational studies of Ronjat (1913) and Pavlovitch (1920), and the monumental work of Leopold (1939-1949) were the first major ideographic studies of child bilingual language development from which conclusions were drawn relating to successful bilingual language acquisition and the benefits ensuing from dual-language development. They attributed successful bilingual speech acquisition in their children to strict adherence to the one person - one language principle, and agreed on the benefits of this approach. Contemporary researchers such as Bain and Yu (1980) substantiate these claims.

Ronjat (1913) stated that the one person - one language principle safeguards the child from interference and reciprocal damage of both languages. Pavlovitch (1920) and Leopold (1939-1949) attested that bilingualism did not harm the speech development or the general mental development of their children. Leopold also observed the earlier separation of sound and meaning, which has been experimentally supported by Ianco-Worrall (1972). Vygotsky (1935) stated that the conclusions drawn from the studies of Ronjat (1913) and Pavlovitch (1920) point to the fact that "each of the two languages in the child's psyche is organized for its own particular sphere of application, its own form of set, which, according to Stern (1924, 1928), hinders the simple mechanical crossing between the two language systems" (p. 19).

As well, Ronjat (1913), Pavlovitch (1920), and Leopold (1939-1949) noted the initial existence of a common pool of mixed speech from which

differentiation occurred very early. Ronjat affirmed his child's early awareness of bilingualism, and Pavlovitch affirmed that his child was conscious of two languages and kept them independent at two years of age. Leopold stated that he first saw signs of his child's awareness of bilingualism at the end of the second year, consciousness of operating with two languages early in the third year, and active separation of the two languages at the end of the third year. This writer finds it difficult to concur with affirmations that the act of speech is an act of consciousness in a young child.

Later studies: There are studies which have presented models by which language encoding could be examined. Though the conclusions made by these studies are logical, the same were arrived at by deduction. Swain (1977) has affirmed an initial mixed code stage which must necessarily be followed by a period of differentiation. Swain went a step further in providing some evidence that the two languages of bilingual children are initially not encoded separately. She argues that the notion of separate sets of rules for both codes would be inefficient in terms of memory storage. Swain supports the idea of a common core of rules, with those specific to a particular code tagged as such through a process of differentiation, being more efficient because the same rules common to both codes would have to be learned only once and kept in common storage for use in both codes. She suggests that new rules particular to either code may also be held in common storage prior to being assigned to the appropriate code through differentiation.

Volterra and Taeschner (1978) have concluded that three stages are readily distinguishable in the evolution of bilingualism: an undifferentiated stage at which the vocabulary of the child is composed of words from both languages; a stage where lexical systems of the two languages are differentiated, but the same set of syntactic rules is used for both languages; and a stage at which two separate linguistic codes exist, each associated with the person speaking the particular language. The authors contend that true bilingualism is achieved only when a child becomes capable of dissociating the languages from the persons originally associated with them.

There are researchers who have addressed the question of the emergence of languages and information processing, but offer incomplete models by which to examine the question in its entirety. An experiment from which beneficial conclusions were drawn, was carried out by Oksaar (1976). In this study, very precisely described as to its setting, the author traced the evolution of the bilingual language acquisition of her child and presented a model of emerging Swedish-Estonian bilingualism from the two to four year age group. She examined code switching and concluded that the contact between languages creates an overall code, parts of which contain elements from both languages, parts of which are typical only for one language or the other, and a part of which is autonomous. Oksaar recognized that in her child the parts of the overall code were activated on the basis of the needs of situations. In acknowledging that research has yet to resolve the question of systematization of languages, she neglected to recognize the value of her own contribution in concluding that a child's ability to switch languages is strongly conditioned by the social contacts in each language, place and person being of

paramount importance among all variables. Unfortunately, her contention that code switching creates language consciousness in a very young child places her among those (Leopold, 1939-1949; Pavlovitch, 1920; Ronjat, 1913) who view the act of speech as consciousness of an act.

Kolers (1968), in his experiments with bilinguals, has hypothesized that bilinguals have both a common and a separate storage of information. He found that information can be stored both in terms of its meaning, in which it is accessed through either language and, therefore, lies in a common "tank," and in terms of its association with the mechanisms, rules, habits and characteristics of the language in which it was acquired, in which case it is accessed only in that language and, therefore, lies in a separate storage tank. He put the emphasis on the method of encoding of each information to justify its accessibility. If the information is available in both languages, that is because it was encoded in both. If it is readily available in only one language, it is because that information was received in only one language. Kolers recognized that the encoding occurs through the language but acknowledged, as well, that the entire process is somewhat more than mere "word rendition" or word acquisition. He observed that the "subjects did not see and store the words individually as visual or phonetic objects; they stored them in terms of their meaning" (1968, p. 83). He acknowledged that bilinguals work "with two distinct sets of symbols" (1968, p. 76), and exemplified this by referring to the different intellectual and emotional responses obtained when the same experience is lived in one or the other of the languages. Interestingly, however, access "is in some cases restricted to the language by which - or more broadly, the context in which, - it was encoded" (1968,

p. 82). Kolers' conclusions, like Oksaar's (1976), are beneficial; however, his model lacks the theoretical groundwork necessary to further analyze the interaction of language systems.

In summary, a bewildering array of information has emerged from studies which often lack sound theoretical premises or which propose incomplete models for the adequate study of child bilingualism and multilingualism. Close examination reveals that studies often operate from too narrow a basis in that they merely attempt to justify limited phenomena according to principles which are not integrated into a larger scheme, that is, the systematization of languages and their interaction. Different conclusions are offered in supporting particular elements of examination. It is also evident that there exist few studies of the specific case of multilingual speech acquisition or models by which such acquisition can be examined more comprehensively. It will be seen how Imedadze's (1967) application of set theory offers a model by which to better account for and interpret such speech acquisition.

Set Theory

The preceding review of theories of language development and the investigations of child bilingualism and multilingualism disclose that these theories and investigations cannot easily be adapted or interpreted to address the principles governing multilingual speech acquisition or to construct a model by which such acquisition can be adequately examined.

It is the contention of this writer that Uznadze's (1966) notion of set and Imedadze's (1967) application of this notion to the question of

child bilingualism provide a psychological model which can be expanded to better account for and interpret the acquisition of multilingual speech and language interaction in early childhood.

Uznadze's Theory of Set. The theory of development of the Soviet psychologist, Uznadze (1966), is similar to the theories of Piaget and Vygotsky in that it views the individual as an active perpetrator of activity and change. However, Uznadze's approach to the development of mental processes and the assumptions underlying his theory are similar only to Vygotsky's. Uznadze's assumptions, like Vygotsky's, do not escape the basic propositions of materialist science. Uznadze defines activity within a socio-historical complex according to the principle of dialectical materialism. Uznadze rejects traditional psychology's assumptions that mental activity can be viewed as the product of abilities which are innate, that "these processes were given directly and initially" (1966, p. 198).

Uznadze's (1966) position on the study of mental activity invalidates traditional psychology's concept of studying cognition, sensation, and volition in the absolute (as the result of inborn mental abilities), and trying to derive therefrom common rules applicable to all potential subjects. This is doomed to failure since any rule so derived does not account for peculiarities of each individual and risks establishing an idiosyncrasy as a norm.

Contrary to both Vygotsky and Piaget, Uznadze (1966) places greater emphasis on studying the individual as a whole in his active relationship with the environment, and less on studying the "individual acts of his mind." Uznadze rejects attempts to explain mental activity through

investigations of cognition, sensation, and volition. Personality is an initial concept for Uznadze. Uznadze's interest in the dynamic relationship between the individual and the environment, and his holistic approach to studying this relationship is similar to Goldstein's (1939) view that psychological phenomena must be evaluated as to their significance for the holistic reality of the individual in a particular situation. One of the major strengths of Uznadze's (1966) theory is his contention that qualitative modifications of the total individual ensue as a result of the integration of quantitative changes.

Another major strength of Uznadze's (1966) theory is that Uznadze, like Vygotsky, establishes the evolution of language as a social process and that language plays an important role in cognitive processes. However, unlike Vygotsky, Uznadze offers a more promising unit of accounting for and analyzing the acquisition of speech. Set determines the acquisition of speech. The theory of set is a more sophisticated account of mental activity and supported by much empirical evidence.

Uznadze's (1966) thesis and the foundation of his theory is the existence of a preconscious state, the set, which underlies all human activity and prepares the appearance, course, and composition of conscious phenomena. The general postulate underlying the theory of set is stated by Uznadze as follows:

"For any phenomena of behavior to appear, it must be assumed that a living being, with the ability of primitive perception and some form of activated need capable of being satisfied in these environmental conditions, develops a relationship with this environment on the basis of the integral state of the set arising in the subject, which leads him to perform purposive actions" (Uznadze, 1966, p. 209).

Uznadze (1966) distinguishes two planes of mental activity. The first plane is the level of "impulsive" behavior, the level of the sets. On this perceptual, practical level, the individual is stimulus bound, and responds directly to given stimuli. Sets direct strings of automatic behavior in response to such stimuli.

The second plane is the plane of objectivization. Whenever a problem arises which cannot be solved at the level of impulsive behavior, objectivization allows the interruption of the impulsive behavior, making a particular segment of the string of actions the object of the individual's attention. Thus, objectivization, by isolating an element from the practical, perceptual level and directing attention solely upon it, brings such element onto a theoretical level. This is possible because through the principle of identity (which holds that everything is equal to itself), the isolated element is recognized as itself in a different context, making its re-experiencing possible. "In the conditions of social life," the designation of objectivated segments of reality is the basis of speech. Once the theoretical solution to a problem is found, its implementation into a practical resolution occurs through the individual's act of will, thus altering behavior. It is on this second plane that a higher form of set is created, a specifically human set. On the basis of objectivization and the participation of the higher form of set, human thought evolves.

According to Uznadze (1966), what differentiates humans from animals is their ability to objectivate on the basis of experiences of others. Animals must experience themselves before they can develop any set towards any activity. They must re-experience each segment of reality anew every time. Humans possess a socio-historical complex unavailable to the animal. Humans develop and satisfy more complex needs based upon

and resulting from their socio-historical complex. Thus, the difference between human mental activity and the activity of animals is that humans, social beings, have the power of objectivization. Accordingly, Uznadze views the directionality of the human organism as different from that of the animal because "the manifestation of his life is the manifestation and personification of social life" (Uznadze, 1966, p. 136).

Pavlov's (1927) elaboration of the reflex theory is assumed to be the physiological basis of the psychological concept of set (Prangishvili, 1962). The level of the sets can be paralleled with Pavlov's first signal system, and the plane of objectivization with Pavlov's second signal system. Pavlov maintained that the role of society and social activity gives shape to the second signal system, the semiotic, symbolic system, and that it is this system that distinguishes man from animals.

Uznadze (1966) formulated his theory on experimental evidence as well as postulates. His major experiment, based on the work of Fechner, Muller, and Schumann, revealed that when a subject successively lifts a pair of objects differing in weight during "fixing" experiments (repetition of the stimuli), at which time a set is fixed, in most cases he will continue to perceive objects of equal weight (the "critical" experiments) as unequal.

Uznadze (1966) showed that, generally, in order to fix a set, repetition is necessary and achieves two essential goals. Firstly, it fixes a set, that is it establishes as impulsive a certain sequence of behavior in response to certain stimuli; and secondly, it allows differentiation to occur, that is, it allows for easy distinction

between related sequences of behavior by emphasizing their differences.

To prove that set is a preconscious state, Uznadze (1966) carried out fixing experiments on subjects under hypnotic sleep. Identical results were obtained as with subjects who knew about the fixing experiments. Subjects under hypnosis still exhibit the same illusion of the set in the critical experiments: spheres are perceived as unequal. Thus, he established that, since it does not matter whether a subject knows about the fixing experiments or not, the nature of the influencing set is preconscious. He further proved that a preconscious state exists and that it arises from the effect of repeated fixing experiments by demonstrating that, when critical experiments are made without fixing experiments, subjects perceive the relationship correctly. Uznadze thus justified that behavior arises much sooner than the development of conscious function, and that psychology must consider the question of sets.

An important property of set was established when Uznadze's (1966) basic experiment was performed on various sensory modes: the movement and influence of set, that is "irradiation" of set. Irradiation proves the influence of a set beyond an experimental sphere where it was designed to exercise influence; a set developed in one modality may reappear and exercise influence in a different modality. Accordingly, set is not a local process, but rather a general state of the personality; it is a state characterized by irradiation and generalization (Uznadze, 1966, p. 36). Uznadze thus proved the central nature of set. Set is an integral state, the basis for all behavior. His holistic approach to set places him in disagreement with Western ideas

that view set as secondary to behavior (Allport, 1955; Dashiell, 1940, 1949; Hebb, 1949, 1958; Bruner and Postman, 1949; Woodworth, 1947), and with Wurzburg psychologists who view set as a mental act (Ach, Marbe, Watt).

Uznadze (1966) emphasizes the need to examine the subject as a whole, to look at the individual's particular, personal experimental results, taking into account personality traits, and not to blindly look at confined experimental results. He demonstrated experimentally that activity in a definite direction may be activated in other ways than by the participation of conscious mental function, or cognitive, emotional, and volitional acts. It may be activated by sets, which reflect the state of the subject as a whole and not his individual mental functions (Uznadze, 1966, p. 203). The ability to develop a fixed set and the ability to reach adequate perception is the basis for Uznadze's study of personality; and the structure of set includes personality traits, temperament, and abilities (Uznadze, 1966).

In summary, Uznadze's concept of set provides a well-defined building block upon which a theory of human development, capable of integrating psychological factors influencing such development, and accounting for the complex interactions of developmental components, has been formulated. The major weakness of this theory is its claim that all psychic processes and behavior can be integrated and organized through set. Such claims must be approached with caution. There is evidence (personal communication with Dr. Hritzuk) that Uznadze's followers cannot explain numerous questions that arise in studying the level of objectivization. However, his unit of analysis is promising because it studies the acquisition of speech more adequately than the

theories of Piaget and Vygotsky.

Implications of Set Theory for the Study of Speech. The versatility of this theoretical framework allows for its adaptation and extension to investigating the principles governing speech acquisition from a new point of view: set determines the acquisition of speech. A theory which has experimentally established that a preconscious state disposes an individual to behave in a particular direction, and which recognizes that the appearance of any behavior requires a need and a situation for its satisfaction, appears useful in interpreting the dynamics of speech. There is much empirical evidence supporting a connection between language and set (Imedadze, 1967; Prangishvili, 1962; Natadze, 1962).

A socio-cultural complex determines what stimuli, what signals are available for the formation of an individual's sets. Set provides the unit through which the individual is capable of perception, which, combined with needs and situations for their satisfaction, gives rise to the power of objectivization. The basis for the acquisition of speech is thus the objectivization of the socio-cultural signals.

Set exercises a determining influence over the development of language. As a code, set allows for scrutiny of every component of speech; it permits isolating elements for the purpose of quantitative and qualitative analysis within a holistic framework. Speech acquisition may be viewed as the establishment of a set.

Application of Set Theory to Child Bilingualism. Imedadze (1967) adopted the theory of set and applied it to child bilingual speech acquisition to explain the mechanism of the alternate autonomous functioning of two languages. The use of a language is conditioned by a

need as well as the occasion provided for the satisfaction of such need. In defining and analyzing such occasion, she incorporates for each individual language, "speech and non speech components," which correspond respectively to Uznadze's (1966) notion of the plane of objectivization and the plane of impulsive behavior. She states that the integration of the need with the speech and non speech components forms the set which predetermines the use of a particular language. As to the evocation of the set predetermining the use of a language, she implies that the identification of non speech components is sufficient when integrated with speech components.

Having observed the language of a child being raised according to the one person-one language principle, and having identified two stages of development, "(a) the stage of mixed speech (up to 1;8) and (b) the stage of discriminated language systems (from 1;8)" which she also found as common stages in the observations of Ronjat (1913), Pavlovitch (1920), and Leopold (1930-1949) (Imedadze, 1967, p. 130), Imedadze concluded that the simultaneous learning of two languages is not simply two separate processes of learning the languages, but rather the development, from a common pool of mixed speech, of two separate language systems (sets) continuously influencing each other in the course of their development.

Imedadze (1967) points to the conceptual defects in the conclusions of the investigations of Stern (1938) and Ronjat (1913), namely that a two to three year old child should be aware of the association of a particular group of words with a particular person; nor does she accept that such association should be made by the child solely on the basis of habit, as stated by Elwert (1960).

Imedadze's (1967) conclusion that the emergence of the autonomy of each of the two languages of the child is "determined by the evolving of two distinctive sets, alternately actualized" (Imedadze, 1967, p. 132) seems correct as a general observation. In the example of her study, a repeated question put to the child in Russian finally drew an answer in Georgian. This Imedadze attributed to the strong Georgian non speech components which existed in the particular situation. She failed, however, to consider the situs of the reception of the Russian question. If indeed the two language sets are separate, how is it that a question in one language is transferred into the set for another language which will pre-determine the language used? I find unrealistic Imedadze's implied proposition that the child first reverted, for identification of the Russian question, to a Russian language set, and then on the basis of strong non speech components in the Georgian language set, reverted to the use of Georgian. Furthermore, this would still not account for the transmission of the understanding of the question from one language set to the other since they are supposedly independent and autonomous.

Imedadze's (1967) study makes two important points: firstly, that two language systems originate from one common state of mixed speech; secondly, that, on the basis of set, the "possibility of the autonomous functioning of two languages" (pp. 129-130) is a very real one. I agree with Imedadze that there exist two levels of set within each language set, but I have found that more precision can be brought to her explanation of the autonomous functioning of language sets.

Preliminary Statement of Findings. To get ahead of my explanation of a theoretical means of interpretation and my observation data, I will state that I have found that the speech component of each language set can be further subdivided into active and passive knowledge. The active knowledge functions autonomously within its own language set, whereas passive knowledge is contained in what I contend to be an underlying set which intersects with all language sets at the level of their speech component.

Through this underlying set it is possible to locate the situs of the reception of language stimuli and to better explain Imedadze's (1967) notion of alternative actualization of language sets. The underlying set offers a more plausible explanation of such a phenomenon. The situs of language stimuli is the underlying set, which is common to all languages. Therefore, the presence of stronger non speech components of one language will activate the set of that language. Thus, contrary to what is implied by Imedadze, reversions do not take place, but rather the underlying set, common to all languages, awaits excitability from external stimuli for actualization of one of the sets.

The underlying set can also account for and explain the effects of a phenomenon peculiar to my observation, which I have termed multiple fixation. Multiple fixation is reinforcement of language stimuli of one language set through the use of another: when a parent acknowledges his/her understanding of a child's active utterance in any language, by translating any utterance into the language in which the child is consistently spoken to by the parent. In short, it is a multiple acknowledgment system.

The primary effect of multiple fixation is the displacement of possible active linguistic benefits into the sphere of the underlying set.

A Theoretical Means of Interpretation. On the basis of Uznadze's (1966) theory of set which recognizes set as the basis for the emergence of speech, Imedadze's (1967) application of set theory to child bilingual speech acquisition, which establishes two levels of set as the determining influence over the development of languages, and my extension of such application, I offer a model better capable of accounting for and interpreting the acquisition of multilingual speech and the interaction of languages in early childhood.

This model recognizes that there exist two levels of set within each language set, a speech level and a non speech level. The speech level of each language set is subdivided into active and passive knowledge. Active knowledge functions autonomously within its own language set, and passive knowledge is contained in an underlying set which intersects with all language sets at their speech level.

This model is a dynamic one, and recognizes the evolution of speech as follows. There exists, at first, a common pool of mixed speech from which all utterances are drawn. This stage is of very short duration and is followed by a stage of differentiation during which the different language sets emerge from the common pool of mixed speech. At the onset of differentiation, however, none of the elements which compose a language set are clearly separate or distinct from the corresponding elements of the other language sets; that is, neither non speech nor speech components are clearly ascribed to one particular language set, rather they intersect. As the process

of differentiation proceeds further, the non speech components and active knowledge of the speech components become ascribed to particular language sets, and passive knowledge of the speech components is contained in an underlying set which intersects with all language sets, until autonomous functioning of the non speech component and the active knowledge of the speech component of each set is realized.

CHAPTER III

METHOD OF RESEARCH

An examination of multilingual speech contributes to furthering research in the general area of child language. In extending ties with other psychologists with the purpose of securing a better insight into the issues in question, we can better pattern our study of the nature and function of language and thought. This chapter describes the method employed by the present writer in studying multilingual speech acquisition.

Objectives

In order to give relevance to the applicability of the proposed model as an interpretive tool to account for the acquisition of multilingual speech and language interaction in young children, it was decided to investigate the speech of my son from age two years to two years, three months. In order to appreciate ongoing behavior and sequences of speech occurrences, an observational method of study, in the form of a daily written record, was chosen. This type of method is a "natural way" in relating the facts of speech acts to the model.

Biographical Notes on the Subject

From birth Andrew has been continually exposed to three different linguistic systems. His father is multilingual, possessing native - like control of three languages: Hungarian, French, and

English. His mother is bilingual, possessing native - like control of two languages: Ukrainian and English. Both parents also maintain passive or working knowledge of several other languages, the most important of which to mention is the father's passive knowledge of Ukrainian, and the mother's working knowledge of French. The father speaks to Andrew exclusively in French, the mother exclusively in Ukrainian, with the exception of a few borrowed (cognate) words from each other's language. The parents speak to each other in English. The parent's decision to speak English between themselves was based on the realization that this language is necessary for life in the Canadian context. A standard educated English, Ukrainian, and French are spoken by the parents.

Both parents have consistently adhered to speaking strictly in one language to Andrew. However, both parents consistently acknowledge their understanding of Andrew's active utterances in any of the three languages by translating any of his foreign utterances into the language in which he is consistently spoken to by that parent. The majority of friends speak to the parents and to Andrew only in English, some mix two or three of the languages, and a few adhere to speaking exclusively in either Ukrainian or French. Subsequent to the time the observation was begun, Andrew visited and was visited by his Ukrainian speaking grandparents on four occasions, visits lasting from a few days to two weeks in duration, during which time Andrew was almost totally immersed in a Ukrainian environment. From birth to seven and a half months, Andrew spent the better part of his waking hours home with his mother, and in essence was exposed predominantly to Ukrainian, partially

to father's French, and heard very little English. Since entering day care at age seven and a half months, full-time week days, Andrew has been predominantly exposed to English: owing to both the numerous hours spent outside the home in an English speaking environment, and to the increase in the number of waking hours, during which he is increasingly being exposed to the English spoken between his parents.

Procedure

As a student of child behavior, I chose to investigate the speech acquisition of my child through the observational method. There were several reasons for deciding to conduct a single case study as opposed to other alternatives. For example, a study of a large sample of children on the basis of a theoretical framework would not serve the purpose of this investigation. That type of study is conducted in the absence of any close and continuous contact between the investigator and the child, and typically lacks accounts of the sequential, natural unfolding of child speech. Large sample studies do not provide detailed and holistic accounts of child speech. They are usually designed for "repeated measures" over various time spans and thereby isolate segregated behavioral occurrences. A descriptive, linguistic analysis, however interesting, is beyond the focus of this investigation.

The purpose of this investigation is to account for continuity of more general behavior, for example, the observation of simultaneous and successive factors in speech acquisition of one child over an extended period of time. An investigation of one's child in the form of a "diary

account" is the oldest of methods in studying child development. Much knowledge has been gained through such investigations (Ronjat, 1913; Pavlovitch, 1920; Leopold, 1939-1949) because they account for spontaneous behavior in naturally occurring events.

Conducting an observational study as a parent is both practical and valuable. It is practical because there is close contact between the child and the parent. A parent knows his/her child well, and understands the child's behavior. It is valuable because parent as observer has the opportunity to observe the child before the emergence of speech and during its acquisition, and follow its development.

The observation of my son Andrew's speech acquisition from age two years to two years, three months, under conditions of continual exposure to three different linguistic systems, was made in his daily actions and performances. (Additional accounts were also provided by Andrew's father and by the staff at Andrew's day care center.) My observations were generally made in the early morning, late afternoon, and evening on week-days, and at varying times on week-ends. (Father's accounts were made on the days I was unable to observe, and day care accounts were made during the morning and afternoon hours on week-days.) All observations were made and recorded when time and circumstances allowed. The observer's role was the usual passive/active one in the context of daily life with the child. My accounts together with day care and father's accounts help give a more complete picture of Andrew's speech activities.

This study is restricted as to the limited times of the day and the variety of situations because it is all this writer could do under the circumstances. One cannot always be with a child, nor can one record everything one hears. An observational study cannot be a complete record of a child's speech. It can, however, account for an adequate sample of the child's vocabulary during the first few years of life.

By design the observation focuses on the phenomenon of speech. In order, however, to appreciate the total context in which speech emerges, speech is tied to specific acts of behavior as much as was possible. The writer acknowledges the importance of observing the circumstances in which speech acts occur.

Informal accounts were recorded as they were made, or entered on slips of paper at frequent intervals and rewritten every evening. Words which became an active part of Andrew's vocabulary warranted repetition only when they reappeared in novel, interesting, or puzzling contexts. The observation recorded as much of everything new as was possible. The accounts are, in a sense, selective in that there are constant occurrences, some of which I may have missed.

Admittedly, the task of observing one's child is not without difficulty. I adhered to stating the facts and interpreting their meanings as objectively as possible. In speaking of interpretation of meanings, we must often probe into hidden processes of the mind, and, thus, admit to the hypothetical nature of such inferences. This writer's inferences can be considered no more hypothetical in nature than those of other trustworthy observers.

Instrument of Examination

The observation is examined on the basis of the model this writer has constructed. The model recognizes that set accounts for speech acquisition and language interaction. It supports the contention that speech proceeds from a generalized state to a differentiated state. Speech acts are analyzed according to the notion that speech is determined by a need and an occasion for its satisfaction, and that the integration of a need with speech and non speech components forms the set which predetermines the use of a particular language.

In recognizing the importance of linguistic analyses of child speech, and that ordinary spelling is in some cases inadequate in accurately illustrating child speech if linguists are to benefit at all from any psychological investigations, I phonetically transcribed Andrew's inaccurately pronounced English, Ukrainian, and French words according to the IPA (The Principles of the International Phonetic Association. London: University College, 1949), and provided English translations of these words. For example:

"ɔ:ɡɒn" (all gone?)

"jabukɔ" ('яблучко' = apple)

"iʔa" ('guitare' = guitar)

I quoted accurately pronounced Ukrainian and French words directly, and provided English translations. For example:

"ciɪ" (juice)

"pomme" (apple)

I also directly quoted accurately pronounced English words. To those qualified and interested experts who may find the observation material useful in examining the growth of vocabulary on a linguistic basis, I leave the labor of completing the picture with a systematic treatment of the data.

CHAPTER IV

OBSERVATION AND EXAMINATION OF MULTILINGUAL SPEECH ACQUISITION

Formation and Function of Set

The model which this writer has constructed has at its basis Uznadze's (1966) building block, set. The formation and function of set at the level of impulsive behavior (non speech level) and the level of objectivization (speech level) was seen in the observation of the speech acquisition of my son.

2 years, 1 day. January 21

Mother's Accounts

Prior to two weeks ago A. showed little interest in his stuffed animals. Now, every few nights or so, he pats them, says, "спатки" (sleep), and always places them face-down on the bed next to himself. If I attempt to flip them over onto their backs, he only flips them over again. A., himself, prefers to sleep on his stomach.

Set is not only determinative of communication, but also of actions: physical set.

2 years, 2 days. January 22

Mother's Accounts

A. was given a balloon, and for the duration of the car ride to the photographer's (fifteen minutes), he tried unsuccessfully to blow it up. (He did not repeat any words I had used in my demonstration and explanation of the art of blowing up a balloon.)

According to Bruner (1975), this type of action (mother holding an object for a child) should be quite distinguishable from a second type of action (child finding out about something). Bruner says that a mother, in this instance, sees her "role as supporting the child in achieving an intended outcome, entering only to assist or reciprocate or 'scaffold' the action" (1975, p. 12). I view such a distinction as being too clear-cut. When a mother holds an object for a child to extract something therefrom, she does much more than simply 'scaffold' the action. She does not restrict herself to holding the object, nor does the child restrict the scope of his action to its physical part. Rather, the mother informs the child about the object, and adds to his knowledge and perception. As Uznadze's (1966) theory indicates, the social context aids in providing select stimuli for objectivization, thereby transmitting experience.

2 years, 2 days. January 22

Mother's Accounts

For several weeks now A. has only uttered "ɔ:'gɔn" (all gone?) as a question. Today, he spotted an empty glass on the night table, and emphatically said, "ɔ:'gɔn" (all gone!).

A.'s extension in the use of this word shows the development of a new set created by the combination of stimulus, objectivization, identification, and exercise of will. He drew from the known sets, the set for the question 'all gone?' and the set for the tone of voice used for emphatic description, and combined them to achieve his purpose.

2 years, three days. January 23

Mother's Accounts

As A. and I were ready to come down the stairs together, we were also ready to begin counting each step together, as we often do: A. said, "один" (one), simultaneously with me as we hit the first step, and then I said, "два" (two), as we hit the second step, but instead of repeating 'два' (two) as he has always done before, he said, "три" (three), in anticipation of the third step; and so continued to say the correct number before taking each step all the way to ten. The rules of the game had changed. My compliments of praise pleased him, as was obvious by his squeals of delight.

With regard to developments that occur during routines, I concur with Bruner (1975) that standardization of "certain forms of joint action with the child," certainly must assist the child in his development because the "standard action formats" must help him "to interpret the mother's signals, gestures, intentions more easily and speedily" (Bruner, 1975, p. 12). It also amounts to constant motivation for the development of new sets.

2 years, 4 days. January 24

Mother's Accounts

A. stood in front of the mirror, giggled and laughed while pulling his turtleneck sweater up over his nose and down again. This is the first time I have seen him spend a considerable period of time in front of a mirror.

2 years, 7 days. January 27

Mother's Accounts

Father was sitting on the floor, wearing a navy blue turtleneck which was bunched up under his neck. A. ran over and began pulling the sweater up over father's face up to his nose. (It would appear that either one, A. recalled his own actions before the mirror several days ago, or, two he associated his navy blue scarf with father's sweater. The way father's sweater was bunched up may have reminded A. of the way his own scarf is wrapped over his face up to his nose and around his neck.)

This can be seen as an example of drawing upon a fixed set in order to give direction to an action which takes place in a situation where stimuli can be recognized.

2 years, 8 days. January 28

Day Care Accounts

A. was telling us that one of the children was "b:'gon" (all gone); ("b:'gon" has been used so far only in connection with objects).

A. extended the meaning of 'all gone'. Drawing upon his old set, A. ventured into creating a new set. The new set includes the old one and an expansion of 'all gone' to also designate people.

2 years, 9 days. January 29

Mother's Accounts

A. saw me put my coat on, he grabbed his coat, dragged it on the floor over to me, and exclaimed, "bye-bye!" This is the first time A. has

dragged out his coat to tell us that he, too, would like to go out.

This is an example substantiating Uznadze's (1966) theory: drawing upon a fixed set, objectivization, identification, nomination, and exercise of will, to achieve purpose.

2 years, 9 days. January 29

Mother's Accounts

A. attempted over and over to get the tricycle in motion, but was unsuccessful. As in his past attempts, he became very frustrated, jabbering in a complaining tone. After a half hour he suddenly left his tricycle and went directly to his horse-on-wheels. This he manipulates well; he obviously needed to compensate for his lack of success with the tricycle. He took pride in showing off his skill to me. After a few minutes, he suddenly jumped off his horse, ran directly over to his tricycle, and squeezed the rubber bulb horn with both hands. To his surprise, it honked. He jumped up and down with squeals of joy, honking the horn over and over again. (He received the tricycle as a Christmas gift, at which time he unsuccessfully attempted over and over to honk the horn. At that time he tried to squeeze the bulb with one hand and with both hands. Today, his first attempt was with both hands. He was so pleased with himself, jabbering all the while).

When a friend arrived for a visit an hour later, he immediately went to his tricycle to show her how he could honk the horn. When father arrived home a half hour after, he did the same.

This is an example of utilization of will to communicate acquired experience seemingly outside language, but not necessarily out-

side a communicative set. Manifestly, there is no need for linguistic communication since the message can be transmitted otherwise.

2 years, 9 days. January 29

Mother's Accounts

After supper A. wanted a box of kleenex. He pulled one tissue out, pretended to blow his nose, walked over to the storage space beneath the sink, opened the door, and threw his tissue into the garbage bag, saying, "ϕe ϕe" (fe), several times.

A. has used "ϕe " (fe) actively on his own initiative several times, but never with reference to a tissue after being used to blow one's nose with. Nor have I ever used 'ϕe' (fe) with reference to a tissue after such use. I have, however, used the word with reference to a tissue being used to clean off A.'s high chair table top and food stuck to his face; and he has used the word spontaneously with reference to soiled tissues in these contexts. Perhaps his pretending to blow his nose and saying, "ϕe " (fe), was triggered by me; I awoke with a cold this morning, and was blowing my nose frequently throughout the day. The meaning of 'ϕe' (fe) could very likely have been extended to now include tissues after being used to blow one's nose with; or he may have extended the meaning at the moment of disposal into the dirty garbage bag. This is an example showing the holistic nature of set and the extension of meaning given to "ϕe " (fe): a new set (for the word) resulting from the combination of new stimuli on the existing set (for that word).

2 years, 10 days. January 30

Mother's Accounts

A. appeared to be most dissatisfied today. He stood in front of his huge toy box, wanting this taken out, then that, pointing at I did not know what. He was not satisfied with anything that was taken out for him. Not until everything was taken out of the box and strewn all over the floor, did he quiet down. It was precisely 'everything' that he wished taken out of the box. While standing at his box, he whined and whimpered, and kept saying, "oh 'dɛdi" (The meaning of "'dɛdi" is unclear. It is difficult to say whether it was his daddy that he wanted, or whether it meant 'help' or perhaps 'daddy's help'. He uttered this same combination on one other occasion, shortly before his birthday, at which time he was also feeling dissatisfied and frustrated.)

The same recurring words can refer to different things and actions. I agree with Piaget that "the application of a given term is governed only in part by attention to properties of objects and events; it is also governed by subjective factors - the child's stance (emotional and/or physical) vis a vis the diverse objects or situations in question" (in Dore, 1975, p. 19). This does not contradict Uznadze's (1966) notion of the central nature of set, but rather substantiates the holistic aspect of it.

2 years, 10 days. January 30

Mother's Accounts

At bedtime I was telling A., " Ти маєш один зайчик." (You have one rabbit.) He immediately responded with, "два" (two). (His saying, "два"

(two), I believe, was not intended to mean that he has two rabbits (one at home and one at school), but, rather, was said in expectation of our counting game. My word, "один" (one), may have been the key word that triggered off the association.) Then I repeated, "два" (two), and he said, "три" (three). Together we began to count his fingers: "один, два, три, чотири, п'ять" (one, two, three, four, five). Then father joined in for a minute. He counted A.'s fingers in French, and A. repeated: "un"; "deux"; "т'ва" ('trois'); "к'ет" ('quatre'); "с'е" ('cinq'). Father left.

There was a pause of several minutes, and A. counted his fingers in Ukrainian, "один, два, три" (one, two, three).

The existing fixed set consists of the game played and all necessarily incidental stimuli, the most important of which, because of the emphasis on sequence in the counting game, are the numbers themselves. Among these the number one appears to be the predominant stimulus triggering utilization of the particular language set because it is so well fixed.

The importance of play cannot be overstated. Bruner (1974) quite rightly emphasizes that "play has the effect of drawing the child's attention to communication itself, and to the structure of the acts in which communication is taking place" (p. 10). Play itself as well as who is played with are important factors influencing the degree and the speed of fixation of a set. Furthermore, the character of play itself is repetition of sequences of action; thus, the more the child plays, the more he repeats (and, therefore, fixes) certain segments of reality. The more he plays, the more chances he has of repeating

portions of such segments in other sequences of actions, thus multiplying the opportunities for objectivization and easing identification.

2 years, 13 days. February 2

Mother's Accounts

I drove to university and parked in front of the library where A. and I were to wait for father. We came here to wait for father only once before, two weeks ago. As soon as I parked, A. became very excited, saying, "papa, papa" (daddy).

Uznadze (1966) has established that young children require few experiments before fixing a set.

2 years, 21 days. February 10

Mother's Accounts

A. repeated a lot of what he heard on T.V.

Every time he saw a four-legged animal with big ears, he said, "puppy" and "'pesrt" ('песик' = doggie) alternately, along with a "гав гав" ('гав-гав' = woof-woof).

This is evidence that an undifferentiated set can be brought into play by any stimulus bearing but loose resemblance to some basic characteristics of that set. The set for the word 'puppy' is a loose, undifferentiated set. The word 'puppy' designates all four-legged animals.

25 months, 2 days. February 22

Mother's Accounts

A. handed me his socks this morning and said, "my ʃə'sɛts"
('chaussettes' = socks). (A. appears to be transferring English plural to French.)

The set developed for forming plurals has not yet been associated with any particular language.

25 months, 8 days. February 28

Mother's Accounts

A. handed me a doll and said, "here, ɣa" (here). Then he handed father the doll and said, "here, pu" ('poupée' = doll). But when father said, "poupée" (doll), A. repeated this word and pointed to his navel; ('пупчик' is the word for navel in Ukrainian).

The set A. uses for the designation of his navel ('пупчик') is not sufficiently fixed. It is still undifferentiated. Similar sounds (in this example, the first syllable of 'poupée') are therefore sufficient to evoke the diffuse set.

25 months, 11 days. March 3

Mother's Accounts

When A. and I play our 'name game' together, pointing to oneself and saying one's name, A. appears confused. He recurrently points to his chest and says, "мама" (mamma), after he sees me point to myself and hears me say, "мама" (mamma).

It would appear that A. understands the meaning of the word 'mama' (mamma) as being applicable to more than one person. This is in no way helped by the fact that the parents designate each other as such in their respective languages, and further, refer to themselves in the third person singular. This is temporarily upsetting proper fixation of the adequate sets.

25 months, 21 days. March 13

Mother's Accounts

A. was looking at a post card, pointed to the picture of a horse, and said, "moo, moo." I talked about the fact that it was a horse. He listened, but said nothing.

It appears that A. has developed a new set. Although still quite undifferentiated, it is a progress from "puppy" designating all four-legged, big-eared animals. The factor of size seems to have intervened for further differentiation.

26 months, 7 days. March 27

Mother's Accounts

A. pointed to his cup of cold milk and said to me, "froid" (cold). Then he pointed to the refrigerator and said, "froid" (cold), and pointed to the kitchen sink and said, "froid" (cold).

26 months, 13 days. April 2

Mother's Accounts

A. pointed to the tape deck and said, "mai'sɪk" ('musique' = music), then pointed to the radio and said, "mai'sɪk" ('musique' = music).

26 months, 25 days. April 14

Mother's Accounts

Cliff and Kathy were not home when we arrived. A. turned to us, and responded with, "ton-ton tɫif нема" (uncle Cliff is not here). He then repeated after me, "ton-ton tɫif нема вдома " (uncle Cliff is not at home).

In the car on the way home, A., on his own initiative said, "ton-ton tɫif нема вдома " (uncle Cliff is not at home), several times. Then, to our amazement, he began naming other uncles: "ton-ton Jules"; "ton-ton Joseph"; "ton-ton i'dɛl" (Michel); "ton-ton sa " (François). (Father often points to and names these uncles in photographs we have at home. A. repeats the names after father, and sometimes attempts to name these uncles on his own initiative. They are uncles he has not met; but he has been told twice in the past week that he will meet them soon.)

26 months, 26 days. April 15

Mother's Accounts

A. saw the clouds and said, "nuages." Father told him he was correct, and that the plane was flying through the clouds. Then A. pointed to the sky and said, "chaud-chaud" (hot). (This is the first time A. associated heat with clouds; perhaps he associated the clouds with steam.)

After fixation of several sets which have an identical property, differentiation of specific elements of the sets will allow the creation of a new and more differentiated set made up of such identified identical property. This property is diversified in experience and associations, and leads to higher types of generalizations. This is an example of the level of objectivization as defined by Uznadze (1966). Old sets are not lost, but integrated into new and more differentiated sets. Vygotsky (1962, p. 114) also recognizes that "every new stage in the development of generalization is built on generalizations of the preceding level; the products of the intellectual activity are not lost."

Language Sets

I agree with Imedadze's (1967) application of Uznadze's (1966) notion of set to the question of bilingual language development. That there exists one set for each language consisting of speech and non speech components, and that such language sets originate from a common state of mixed speech appears to be an adequate interpretation. My model, however, integrates one further component: the underlying set. This set is the result of the subdivision of the speech component of each language set into active and passive knowledge. Passive knowledge common to all sets is contained in an intersecting set, the underlying set. The existence of the underlying set appeared to this writer in two different forms.

The Underlying Set. It was realized that meaning must flow laterally, unimpeded among language sets. In examining Imedadze's (1967) example and theoretical explanation of alternate actualization of languages in the child of her study, I came to the conclusion that it was unrealistic to account for the child's answer in a language different from that of the question solely on the basis of alternate actualization. Of course, Imedadze rightly asserts that from an identified non speech situation flows the selection of the use of one set over another, and, therefore, correctly analyzes the influence of the Georgian non speech component (the mother) in triggering the answer in that language. She fails, however, to account for the situs of the Russian stimuli. I contend that the situs of reception is located in the underlying set common to all languages, and that the strongest non speech component will trigger the use of a particular language set. That meaning must flow laterally, unimpeded among language sets was seen in my observation of Andrew.

25 months, 1 day. February 21

Mother's Accounts

As father was leaving his morning, A. said, "bye-bye, maman." (mamma). I corrected him with "nana" (papa), he then said, "'dedi."

This is proof of transfer of meaning among language sets. A.'s mistake was quickly corrected in a different set (mistake in French, correction in Ukrainian), thus reinforcing and further fixing the correct designation in Ukrainian. From this set A. immediately drew the corrected meaning, which he expressed, however, in the active knowledge portion of the speech component of his dominant language set.

A.'s utterance of the corrected form in English is sufficient proof that he understands mother's correction in Ukrainian of his erroneous use of the French word. This is proof of the existence of an additional underlying set which combines all passive knowledge of all the linguistic sets. Thus, where A. makes a mistake in set I, is then corrected in set II, and on his own initiative uses the corrected form in set III, I conclude that A. uses the underlying set, influenced, for the selection of an active portion of a speech component of a set, by the strongest non speech component, which happens to be the non speech component of set III. How else could meaning flow so freely among these sets? (It will be seen how mother has become strongly associated with parts of the English language set's non speech component.)

The interconnections between the non speech and speech components of the language sets, and the intersecting underlying set were apparent throughout the observation.

2 years. January 20

Mother's Accounts

A. often said, "papa" (daddy), when he heard father's footsteps approaching.

This particular example shows the holistic nature of set. A stimulus such as footsteps may influence the selection of a particular language over another. The use of French was triggered by an auditory stimulus, which is part of the non speech component of the French language set.

2 years, 1 day. January 21

Mother's Accounts

A. waved good night to father from the top of the stairs and said, "bye-bye, 'si:u " (see-you); ('si:u " is a new word spoken in our presence; 'bye-bye, see-you' is said to him upon leaving day care almost every day).

The importance of the use of this word in terms of set is apparent. A.'s speech level of set, consistently and daily reinforced in its active component as to the ritualistic form of taking leave, was called upon and utilized when a sufficiently strong non speech stimulus (coupled with motivation) arose, namely taking leave of father. The most readily available active speech component is that of the English set, which was drawn upon because it is by far the most fixed for the purpose. Uznadze (1966) has established that the better a set is fixed, the higher its excitability. (It will be seen how father has become strongly associated with parts of the English language set's non speech component.)

2 years. 8 days. January 28

Mother's Accounts

Father picked A. up from day care. As father often does, he told A., "Dis au revoir." (Say goodbye.). A. waved to all and said, "bye-bye."* One little girl, who overheard the French, turned to A. and said, "Au revoir, Andrew." A. acknowledged her with, "ɔ'vw^" ('au revoir' = goodbye).**

*It can be seen at this point that reinforcement of one set within the context of another (A. speaking in one language and being rein-

forced in another) does indeed achieve a certain degree of fixation which expands the underlying set containing passive knowledge. This set is flexible enough, however, to allow for immediate lateral transfer with the language set used to execute the request. Unfortunately, the degree of fixation is not sufficient to produce an automatic initial response within the same set framework.

**The French word "о'vw^" is the active response to the injection of strong French stimuli (non speech and speech) by the French speaking little girl. A. receives, once more, the stimulus in his underlying set and draws on the active knowledge portion of the speech component of the language elicited by the strongest non speech component.

25 months, 7 days. February 27

Mother's Accounts

In the kitchen: I was at the sink, A. and father were seated for supper. Wanting some milk and pointing to his cup, A. said, "my ко" ('МОЛОЧНО' = milk). Father looked up at A., and immediately A. said, "my jε" ('lait' = milk).

This is another example of the influence of a non speech component in triggering the use of a language set. Again, the holistic nature of set is seen through the diversity of stimuli influencing language selection. Here, a single questioning look is sufficient.

25 months, 8 days. February 28

Father's Accounts

A. would not repeat any French with reference to his music box.

Mother exclusively acquainted A. with the use of the music box. Previous to this day she had been the only person-element of the non speech component of a language set with reference to the music box.

26 months, 25 days. April 14

Mother's Accounts

We were driving to Kathy and Cliff's. We had not told A. where we were driving to. Half way to our destination, A. recognized the route. He became very excited and began shouting, "ton-ton tɫif " (uncle Cliff). He also imitated Cliff's hand movements by swinging his arms in the particular manner, and recalled Cliff's most prominent words, "oh, boy - oh, boy."

We recognize the holistic nature of set. There exist a number of interconnections between non speech components. In this example we see the person associated with location, mannerisms, and expressions.

Multiple Fixation. As a result of the very unique conditions of the environment of my child, it quickly occurred to me that reinforcement, as practiced by both parents, is a notion different from repetition as envisaged by Uznadze (1966). Instead of fixing a set within a linguistic context correlated with that set, the fixation takes place within the context of a different linguistic set. For Imedadze (1967), fixation of a set always occurs wholly within one language set. The acknowledgment of utterances in one language through a different language results in what I have termed multiple fixation. Multiple fixation creates

certain results which are matter of fact and have been observed. These facts can be most satisfactorily explained through the underlying set.

Multiple fixation appears to not only delay progression of the active elements of the speech components toward autonomous functioning, but also expands mixing of the active elements. If we acknowledge that A. understands all three languages, and knows more than he can say, than a set containing his passive knowledge (meanings) must exist. Multiple fixation also debases the association between language and person and renders reinforcement within each language set more difficult. The process to connect these meanings with their verbal shells (the words in the active portions of the speech components) is thus hampered: A. dwells upon the meanings in the underlying set, trying to draw upon the most readily available active elements according to the strongest non speech component.

One of the best examples of the effects of multiple fixation is the following:

2 years, 8 days. January 28

Mother's Accounts

A. hurt himself, came to me and said, "быба" (sore). I asked, "Быба? Ты маеш быбу?" (A sore? Do you have a sore?). He immediately ran to father and said, "быба" (sore). Father asked, "Tu as un bobo?" (Do you have a sore?). A. answered, "un bobo" (a sore). He then returned to me and said, "un быба" (a sore). I then said, "Быба. Ты маеш быбу." (A sore. You have a sore.). A. replied, "un быба" (a sore), and ran off. (This is the first time A. coupled "un" with "bobo". It is interesting to note that A. also paired French "un" with

Ukrainian "бyбa" ; Ukrainian does not possess articles.)

This is a direct result of multiple fixation. We see the effect of reinforcement of a set in the context of a different linguistic set through acknowledgment and repetition in that different language. Multiple fixation appears to hamper the speed of differentiation of the different active knowledge parts of the speech component of each language set.

A.'s 'hurt' drew an initial reaction, an utterance predetermined by one specific set. This set was reinforced, and better fixed, within the same context by the mother. From this point on, we see a marked departure from Uznadze's (1966) notion of repetition: A. communicates his experience within the context of his reinforced set to father who proceeds to fix such experience by positively acknowledging his understanding of it, but unknowingly displaces the whole linguistic benefit of the additional reinforcement by creating a multiple acknowledgment system. A. immediately draws upon father's linguistic set and replies in same, thus transferring laterally the experience already fixed twice, into a second linguistic set. These sets have now effectively intersected, in that the same experience has been evoked in both linguistic sets and acknowledged in both linguistic sets with an additional cross-acknowledgment. Multiple fixation has taken place from which results the hybrid "un бyбa," which combines both linguistic sets at the intersection of the active knowledge portion of their speech components.

Throughout the observation, the progression of the effects of multiple fixation was apparent.

2 years, 2 days. January 22

Mother's Accounts

We were out for a mid-afternoon ride, and while looking out the car window, A. saw a dog running down the sidewalk; he pointed and exclaimed, "ti'jẽ" ('petit chien' = small dog), after which his father answered, "Oui, c'est un petit chien." (Yes, that is a small dog.). Again, A. said, "ti'jẽ" ('petit chien' = small dog.), and imitated "гав гав" ('гав-гав' = woof-woof). I interjected with, "Так, то песик." (Yes, that is a dog.); A. repeated, "песик" (dog).

2 years, 3 days. January 23

Mother's Accounts

Father took A. out of bed this morning and brought him into our bedroom where I was still in bed. A. caught sight of me, pointed and said, "папа" (daddy). Father said, "Non, c'est maman." (No, that is mamma.); A. repeated, "maman" (mamma). I said, "мама" (mamma), and A. repeated, "мама" (mamma).

2 years, 11 days. January 31

Mother's Accounts

A. was off to bed with father, and yelled to me, "'ba:ɲitʃ" ('добраніч' = good night). Father said, "Dit bonne nuit, maman." (Say good night to mamma.); A. repeated, "ɔn'nuʝ, maman" ('bonne nuit' = good night, mamma). Then after a short pause, he said, "ɔn'nuʝ, maman" ('bonne nuit' = good night, mamma).

2 years, 14 days. February 3

Mother's Accounts

A. came to me, hands on his bottom, and said, "un буба " (a sore).

I asked him, Андрійко має бубу?" (Does Andrew have a sore?).

He answered, "un буба" (a sore). (He combined the French article "un" (a) with the Ukrainian word "буба" (sore).)

2 years, 16 days. February 5

Mother's Accounts

Father put A. to bed; every time father said, "bonne nuit," A. replied, "ba:ɲitʃ " ('добраніч' = good night).

2 years, 18 days. February 7

Mother's Accounts

A. ran into the wall this evening, and said, "un буба" (a sore). I asked, "Буба? Ти маєш бубу? Покажи мені." (A sore? Do you have a sore? Show me.). A. answered, "буба" Father asked. "un bobo? Tu a un bobo?" (a sore? Do you have a sore?). A. answered, "un bobo" (a sore).

2 years, 20 days. February 9

Father's Accounts

Approximately forty-five minutes after mother's departure, A. went to the window, raised the curtain, pointed, and said, "мама" (mamma).

Although it would appear the identification of the person with the language exists in A., it is being strongly debased because of multiple fixation. The parent is still a strong non speech element of his/her language set: when there are no other direct external stimuli directed at A., this non speech element determines his use of a language. However, as multiple fixation occurrences are increasing, each parent is becoming more and more associated with parts of both his/her language non speech component and with the English set's non speech component. This is further aggravated by the use of English between parents, which accounts for each parent becoming less of a strong non speech component of his/her own language.

2 years, 16 days. February 5

Mother's Accounts

While alone with father in the kitchen, A. handed him his empty cup, and asked "more." Father looked at A. and remained silent; A. immediately said, "ãkɔ" ('encore' = more). Father asked, "encore?" (more?). A. answered, "ãkɔ" ('encore' = more).

The benefits of not acknowledging linguistic references which lie outside the set can be seen in this example. When acknowledgment is not obtained by A., a situation of need is created which forces the appropriate language set into play, leading further through the exercise of will to fulfilment of the purpose. This is a good way to avoid multiple fixation and further limit the parent to the non speech component of only one language set.

2 years, 21 days. February 10

Mother's Accounts

We turn on Sesame Street two to three times a week for A. to watch, but he has never shown any real interest, except for the occasional glance at the T.V. He appears content to play with his toys and with us. He is always most enthusiastic to play with us at the end of a week-day. Today, however, he actually sat for short periods of time and watched Sesame Street with great interest. He would point and ask, "huz'dæt" (who's that?). Father and mother both would respond by asking the same question in Ukrainian and French, and then answer the question by naming, in English, each individual muppet. A. did not ask his question in French or Ukrainian, but continued with "huz'dæt" (who's that?).

2 years, 22 days. February 11

Mother's Accounts

With every little knock or bump, A. came running, saying either, "un бyбa" (a sore) or "бyбa" ([a]sore), insisting that his injury be kissed.

2 years, 23 days. February 12

Father's Accounts

A. said, "more," several times today, when he wanted more food and juice. Toward the end of the day he once said, "more ciK" (juice).

2 years, 27 days. February 16

Mother's Accounts

A. asked me for "pomme" (apple) while the three of us were seated for supper. I asked, "Андрійко хоче яблучко?" (Andrew wants an apple?); he answered, "pomme" (apple). I repeated my question; he answered, "'уко" ('яблучко' = apple). (This word was spoken for the first time.)

25 months, 9 days. March 1

Mother's Accounts

On his own initiative, A. said, "добраніч, папа" (good night, daddy), to father at bedtime.

25 months, 10 days. March 2

Day Care Accounts

A.'s shoe came off. He brought it to me and said, "my shoe off."

A.'s English language set is more fixed and more differentiated with respect to structure and grammar than the Ukrainian and French language sets. He speaks up to three- word sentences in English, but not in Ukrainian or French.

25 months, 19 days. March 11

Mother's Accounts

A. carried out various requests given him in all three languages. With the English speakers, A. only spoke English; with father, Kathy and me, he mixed all three languages, speaking mostly French with father, and mostly Ukrainian with Kathy and me; and with the French speaking girl,

he spoke only French.

It appears at this time that English is the predominant language. Less mixing occurs in its use. The reason why there is more mixing within the Ukrainian and French language sets may be due to the fact that a common distinct language is used by the parents to communicate with each other: English. Thus, it appears less important to A. to properly bring forward actively totally cohesive French or Ukrainian sentences free of mixing. Motivation is lacking for the production of speech wholly within one linguistic set. A.'s use of language on this occasion proves that the required sets are present for identification of requests in all three languages, but part of the French and Ukrainian sets are becoming more passive as a result of multiple fixation.

25 months, 22 days. March 14

Mother's Accounts

I was changing A.; he put his hand on his bottom and said, "je" ('derriere' = bottom). I said, "Так, дупця." (Yes, bottom.). He laughed, but said nothing more. (A. began to say "je" in this sense approximately two weeks ago to father. This was the first time he said it to me.)

25 months, 1 day. March 21

Mother's Accounts

A. pointed to father's cigarette and said, "at at" (hot). Father said, "Oui, c'est chaud." (Yes, this is hot.). A. repeated, "chaud." He

walked over to me, pointed to my cup of coffee, and said, "at at" (hot).

I said, "Так, ця кава гаряча; це гаряче."

(Yes, this coffee is hot; this is hot.). He repeated, "ɦatʃɛ" (hot).

26 months, 3 days. March 23

Mother's Accounts

A. pointed to the image on the T.V. screen and asked, "ke'sa"

('qu'est-ce que c'est, ça?' = what's that?). I translated, "Що то?"

(What's that?); A. repeated, "tɔ'tɔ" ('що то?' = what's that?), and immediately answered his own question with, "auto" (car). He then laughed and said, "tɔ'tɔ auto" ('що то ?' = what's that?) ('auto' = car).

(It would appear that A. was aware of the similarity among the sounds and found it quite amusing.)

25 months, 23 days. April 12

Mother's Accounts

Just as I was ready to pour milk into A.'s bowl of cereal, he emphatically said, "no, молочко" (milk). After a few spoonful of dry cereal, he demanded, "lait! lait!" (milk! milk!). I asked, "Ти хочеш молочко?"

(Do you want milk?); he answered, "хочеш молочко" (want milk).

26 months, 27 days. April 16

Mother's Accounts

When playing alone A. speaks up to four-word English-only sentences.

When mixing French, Ukrainian, and English (English being predominant), he speaks up to six-word sentences.

When the three of us are together, he tends to mix all three languages (French being predominant), speaking up to four-word sentences.

He also tends to mix all three languages when alone with either mother or father.

When mother is alone with A. for a long peirod of time, Ukrainian begins to emerge as dominant, and French vocabulary decreases.

With father alone, A.'s French not only increases quantitatively, but Ukrainian frequently drops off altogether.

26 months, 28 days. April 17

Mother's Accounts

The three of us were together all day; A. spoke to us in hybrid sentences: French predominant, next Ukrainian, little English.

Three-word combinations that emerged today were: "baby sale мачик " (baby [has a] dirty ball) and " там мячиц, là" (there [is the] ball, there).

The English language set clearly shows less mixing than the French and Ukrainian sets. However, when selected stimuli (resulting from the isolation of A. with one parent), influencing the evoking of either Ukrainian or French, are directed at A. for long periods of time, A.'s responses are more and more restricted to the context of one of these language sets, with less mixing with the other language sets. The fact that longer sequences of streams of words are produced by A. when mixing all three languages (English being predominant) indicates that: one, the active elements of the speech components of all of A.'s language sets

do not yet function totally autonomously; and two, multiple fixation appears to be not only delaying progression toward autonomous functioning, but at this stage even expanding mixing of the active elements.

CHAPTER V

CONCLUDING STATEMENT

The purpose of the present study has been to offer a comprehensive model capable of accounting for and interpreting the acquisition of multilingual speech and language interaction in early childhood. This thesis discussed the significance of language and the general problem of speech. The adequacies and inadequacies of prominent theoretical frameworks and models by which to study the question of child speech acquisition were reviewed. It was determined that one area which holds promise of furthering our understanding of the general problem of speech and in which little attention has been received is the specific case of multilingual speech acquisition. It was established that Uznadze's (1966) notion of set coupled with Imedadze's (1967) application of this notion to child bilingualism is an adequate basis upon which an extension is possible to better explore child multilingualism.

The observation of the speech acquisition of my son basically substantiated Uznadze's (1966) notion of set. The observation illustrated the holistic formation and functioning of set at the level of impulsive behavior (non speech level) and the level of objectivization (speech level). It was seen how repetition fixes certain segments of reality, and that the better a set is fixed, the better the chances for multiplying the opportunities for objectivization, identification, nomination, and exercise of will. It was seen how the development of set proceeds from a diffuse state to a differentiated state, and that old sets are not lost, but rather integrated into new and more differentiated sets.

The observation also substantiated Imedadze's (1967) application of set as an interpretive tool to examine child bilingualism. This writer agrees that there exists one set for each individual language, each consisting of non speech and speech components, and that such language sets originate from a common pool of mixed speech. The model this writer has constructed recognizes that the speech level of each language set can be further subdivided into active and passive knowledge. Active knowledge functions autonomously within its own language set, and passive knowledge is contained in an underlying set which intersects with all language sets at their speech level. The existence of the underlying set was demonstrated through examples illustrating that meaning must flow laterally, unimpeded among language sets, and that fixation of a set does not always occur wholly within one language set as Imedadze contends.

In applying my model to the observation of the speech acquisition of my son I was able to more completely account for and interpret the development of three languages and their interaction. From the observation data one sees that A.'s use of English as an independent set suffers little mixing and is in a position of dominance because less multiple fixation exists for it; and when multiple fixation occurs within the context of the two other languages, it favors English because the parents as well as the multiple fixation fact itself are more and more integrated in the non speech component of the English set. In this way multiple fixation itself becomes a non speech component of the English set.

Whenever A. uses Ukrainian or French, however, great levels of mixing are evident, but only in multiple fixation settings (which happen to be the most predominant settings). On rare occasions when one parent spends a considerable amount of time alone with A., A. can be brought back to an active participation in that parent's language set (with a tapering off occurring of that parent's non speech multiple fixation influence). A.'s language for that parent then shows considerably less mixing. Unfortunately, these moments being rare, French and Ukrainian are developing almost exclusively within the context of the underlying set. As well, in this particular study, the parents themselves have begun to be integrated into non speech components of several sets. Thus, Ukrainian and French are becoming more and more passive.

A supplementary element accounting for the Ukrainian and French sets becoming more passive is the element of motivation (need), which it must be remembered is, for Uznadze (1966), one of the two preconditions to the formation of sets. The fact that A.'s parents communicate with each other in English, and acknowledge A. in any language, lessens A.'s need to properly bring forward actively totally cohesive sentences free of mixing.

Although the French and Ukrainian sets are becoming more passive, it is interesting to note that longer streams of words forming comprehensible meaningful sentences are achieved in mixed speech than in A.'s best set, English. This is but further evidence of the existence and composition of the underlying set.

The proponents of the one person - one language principle (Ronjat, 1913; Pavlovitch, 1920; Leopold, 1939-1949; Bain and Yu, 1980) are essentially correct in asserting that one of the most important stimuli acting upon the formation of separate linguistic systems is the constant association of one particular person with one particular language. Although at a cursory glance it would appear that this principle is respected by the parents of the child in the present study, fundamental departures were taking place. More precisely, although each parent consistently uses only one language when speaking directly to the child, each parent intervenes in the non speech level of the other linguistic sets by constantly reinforcing utterances within these sets. Although the child may not be consciously aware that he is being understood in a language other than the one in which he is being spoken to, it is evident that he is acknowledging such constant reinforcement. He is mostly using the speech of his best fixed language set. Multiple fixation leads to a decrease in the importance of the surrounding stimuli and a lack of motivation with respect to the exclusive use of particular languages, and appears to delay the formation of autonomous language systems.

The findings of this study imply that routine in the home, that is, strictly adhering to the one person - one language principle, should be a priority. All extra contextual stimuli relating to a particular language should be kept as much as possible solely within the framework of that language. Isolating each language set as a total whole for social-cultural experiences should lead to better qualitative developments within each language set and accelerate the formation of autonomous language systems. These ideas can be seen in Figure 1., 2., and 3.

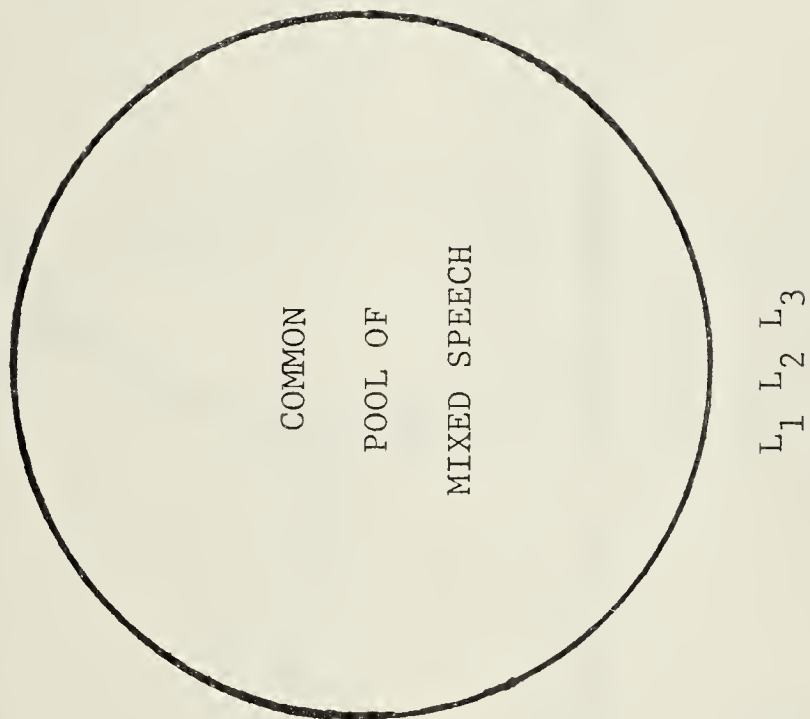


Figure 1.

Set and the Evolution of Multilingual Speech Acquisition - Stage I

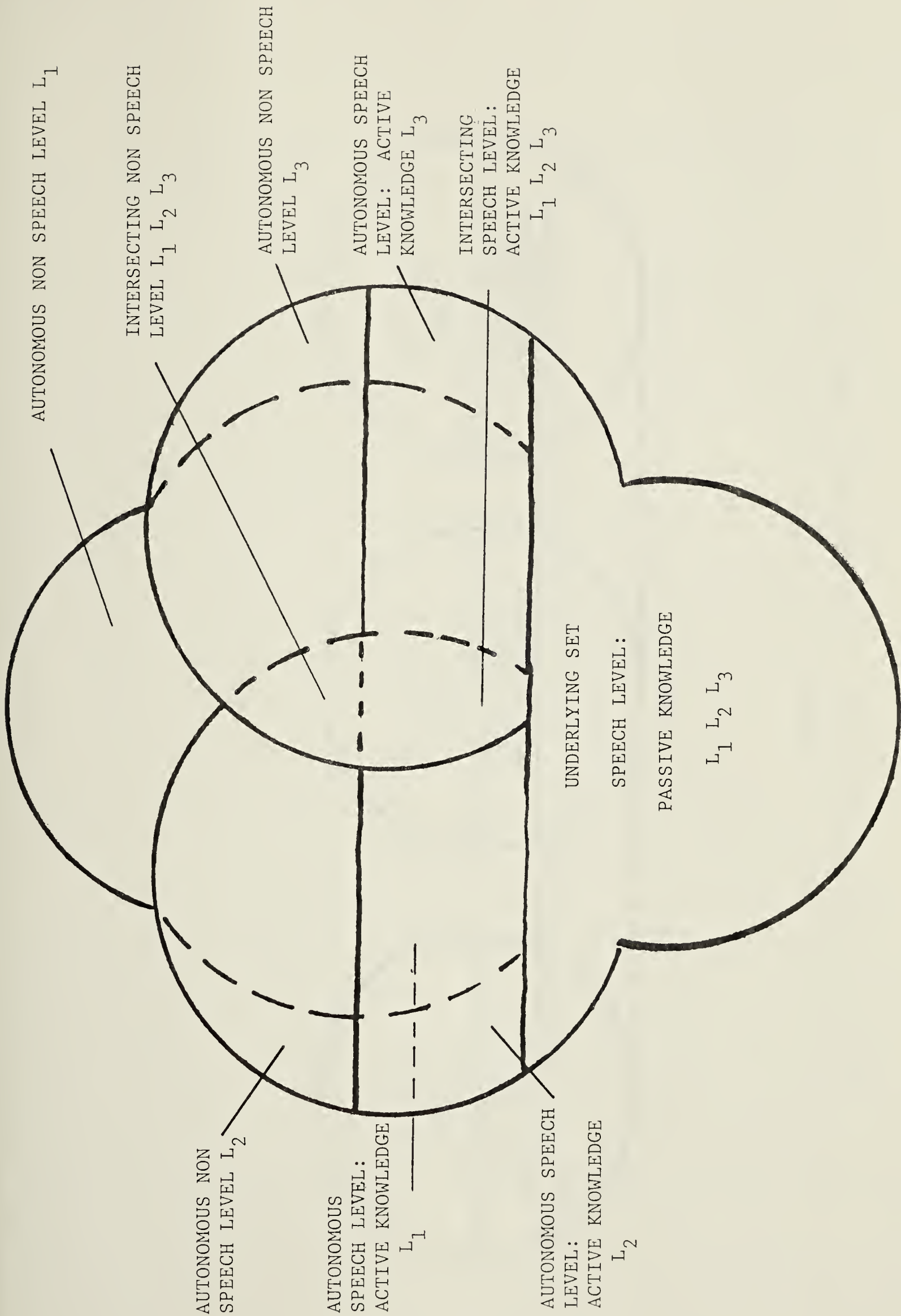


Figure 2.
Set and the Evolution of Multilingual Speech Acquisition - Stage II

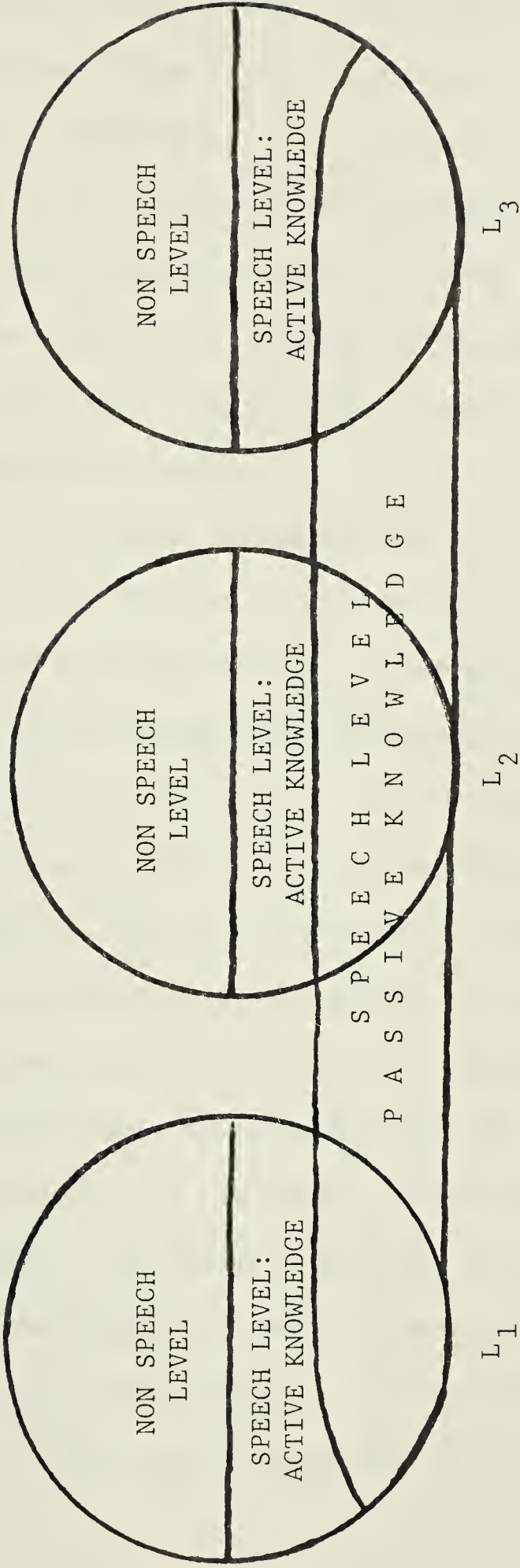


Figure 3.

Set and the Evolution of Multilingual Speech Acquisition - Stage III

The preceding Figures illustrate the three stages in the evolution of multilingual speech acquisition in early childhood. Having observed the multilingual speech acquisition of my son from age two years to two years, three months, it is my contention that between the stage of mixed speech and the stage of differentiated speech systems, there exists a stage in which languages intersect. Language development is a gradual process, and the evolution from a mixed stage of speech to a differentiated stage is not completed suddenly.

On the basis of set, my model recognizes the evolution of multilingual speech acquisition as follows. There exists, at first, a common pool of mixed speech from which all utterances are drawn, followed by a stage of differentiation during which the different language sets emerge from the common pool of mixed speech. At the onset of differentiation, however, none of the elements which compose a language set are clearly separate or distinct from the corresponding elements of the other language sets; that is, neither non speech nor speech components are clearly ascribed to one particular language set. Rather, they intersect. As the process of differentiation proceeds further, the non speech components and active knowledge of the speech components become ascribed to particular language sets, and passive knowledge of the speech components is contained in an underlying set which intersects with all language sets, until autonomous functioning of the non speech component and the active knowledge of the speech component of each set is realized.

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APPENDIX A:
OBSERVATION OF
MULTILINGUAL SPEECH ACQUISITION

2 years. January 20

Mother's Accounts

A. awoke this morning greeting me and his stuffed animals with, "hi, haɥ'ju:" (how [are] you?).

At breakfast A. looked overly fascinated with the milk shaking in the cup when he shook his high chair.

He finished his milk, tipped his cup upside down and asked, "ɔ:'gɔn" (all gone?).

He often said, "papa" (daddy) when he heard father's footsteps approaching.

He kept repeating, "hi, haɥ'ju:" (how [are] you?), greeting various objects in the kitchen.

When he finished eating his apple, he asked for "jabuko" ('яблучко' = apple).

In the presence of the guests that were gathered at our house for A.'s evening birthday celebration, A. danced around to music. He tried to blow out the two candles on his birthday cake, but was unsuccessful. With each photo being taken, he would momentarily halt his attempts at blowing out the candles, and begin to clap his hands and say, "ji:" (yeee). He appeared to be listening intently to his father's explanations of how to assemble a set of blocks, then became so involved in trying to assemble the blocks himself, he hardly spoke and did not repeat any words spoken to him.

He knew immediately when he saw the wrapped birthday gifts that he could rip them open and whatever was inside was for him. (The only other time he has ever seen wrapped gifts was at Christmas a month ago.)

One of A.'s birthday gifts was a friction-powered fire engine. He pushed it and expected it to go only a short way, but instead, it continued to move down the hall a long distance. He was very surprised and immediately began to examine and inspect the engine's wheels. He was jabbering away incomprehensibly, with the exception of the often asked, "hwas'dæt " (what's that?). As much as we tried to explain the reasons for its self-powered movement, which needed only an initial push, A. remained puzzled.

A.'s grandparents called to wish him a happy birthday. He held the receiver, listened, did not say anything at first, and then exclaimed, "hi, hi."

(A.'s grandparents call once or twice a month, and several times within the last five months we have given A. the receiver. It was not until the last time they called, January 2nd, that A. finally said something: "hi." Previously he only listened with a very serious and contemplative expression.)

2 years. January 20

Day Care Accounts

Andrew had a ball and while throwing it he appeared to say "teacher here." He says, "heɪ:" (here you are), when trying to get another child's attention.

He's very physically active and runs most of the time.

A. said, "cookie" and "birthday ";

"'dɔrsikeɪ" (Dorothy, O.K.).

A. says: "hi, Mary," "puppy," "cow," and "cat."

If someone else has a toy and A. wants it, he says, "I want it."

If he does not get it, he lies on the floor, kicks and cries.

He has begun to hit other babies when he does not get his way.

A. loves to talk and make sounds, although we cannot always distinguish what he is saying.

Whatever he is playing with is "mine," and if one of the other children tries to take it, he tells them, "no" or "don't."

He is very curious and will often ask, "hwəs'dæt " (what's that?).

He can identify pictures of "puppy," and that puppy says, "wuf wuf" (woof-woof).

He can say some of the children's names: "Mary," "Derrick," "Shantel," "Sa:n" (Shan), "Trisha," and his own name "Andrew" and "Andew."

A. said, "yes" and "two."

He loves to climb in and out of boxes and says, "peek-a-boo."

A. understands most of what is being said to him and often tries to repeat it.

2 years. 1 day. January 21

Mother's Accounts

A. once again awoke greeting his animals and me with, "hi, həy'ju:" (how [are] you?).

He heard running water in the bathroom and said, "papa" (daddy).

A. has been repeating words for several months now, but sparsely speaks on his own initiative. He finished his milk at breakfast and asked, "ɔ:'gɔn" (all gone?).

He was dropped off at day care, gave mommy a kiss on request, and ran off to the toddler room waving and saying, "bye-bye," all the way.

A. was driven home from day care by his father, and upon arrival was immediately seated for supper. All the while he was eating, he chattered away, addressing us alternately, as if telling us all about the day's events; we understood nothing of what he said.

I gave A. a cup of juice and said, "На, твій сік." (Here is your juice.). He repeated, "cik " (juice); and upon finishing his juice, requested more "cik'." (juice!).

(Usually, he only says, "εε " (eh, eh), when requesting something to drink, holding his cup in an outstretched hand.)

After supper he opened up a belated birthday gift. He was ecstatic. With the new guitar in hand, he went over to the sofa, behind which stands father's guitar, pointed and directed a course of expressive jargon at us. Father took his own guitar and said, "guitare" (guitar). A. repeated, "ita" ('guitare' = guitar).

I said, "гітара " (guitar), and A. repeated, "гітара " (guitar).

They both proceeded to sit down and strum their guitars. (A. has often listened to his father play, and always sings along, dances, and claps his hands simultaneously all around the room.) Initially he refused to hold his new guitar properly because he could not see the strings; so he held it flat on his lap, strummed and strummed, watching his movements, singing along very little. Ten minutes later when father put his guitar away, A. attempted to hold the guitar in proper position, humming the note of each string plucked, eventually wailing away with strings of "u:" and "ju:". Then he jumped up and began walking around the room, still plucking away and singing: stopping at one and two minute intervals, bending down and placing his

guitar gently on the floor, jumping back up, giggling and laughing most heartily, clapping his hands, exclaiming, "jɛ:" (yea). We acknowledged his performance with rounds of applause, and he continued the routine for approximately a half hour. He played in the bathtub for one hour this evening. As usual, he resisted getting out. I drained the tub with him still inside, and when he realized the water was all gone, he pointed to the bottom of the tub and asked, "ɔ:'gɔn" (all gone?). He listened intently to my explanation, but repeated nothing.

A. waved good night to father from the top of the stairs and said, "bye-bye, 'si:u " (see you); ("si:u" is a new word spoken in our presence. 'bye-bye, see-you' is said to him upon leaving day care almost every day).

Father said, "bonne nuit" (good night), and A. repeated, "ɔn'nyj " ('bonne nuit' = good night). He took his two stuffed animal rabbits to bed, gave mom a few kisses, and repeated, "ba:ɲits" ('добраніч' = good night).

(Prior to two weeks ago he showed little interest in his stuffed animals. Now, every few nights or so he pats them, says, "спати " (sleep), and always places them face-down on the bed next to himself. If I attempt to flip them over onto their backs, he only flips them back again. A., himself, prefers to sleep on his stomach.)

2 years, 1 day. January 21

Day Care Accounts

When A. comes into the back play room he says, "hi."

When he threw the ball today he said, "play ball," then "wi" (whee).

When he gets angry he throws toys around.

He jumped off a toy train, bumped his nose, and it bled a bit. Did he ever cry!

He always has a good appetite; ate his bowl of soup and sandwich today, and, as most always, wanted the other children's.

A. loves to play; often teases the other children; is very curious, asks a lot of questions; talks a lot.

2 years, 2 days. January 22

Mother's Accounts

A. awoke and played a bit before breakfast. He spoke the following English words: "hi, haʊ'ju:" (how [are] you?); "puppy"; "ɔ:'gɔn" (all gone?); "hwəs'dæt " (what's that?). (Most every morning, A. awakes speaking English; English is beginning to show its predominance.)

He walked into the bedroom, rushed over to a sleeping father, and said, "papa, papa" (daddy, daddy).

He intentionally shook his high chair again today to watch the milk shake in the cup.

I took A. to be fitted for new shoes. He sat and observed the surroundings with great interest, but was shy with the salesman. He wanted mommy close by. (For the past month we have noticed that A. has become rather shy with strangers, which for A. is a real change, since he has always been openly friendly to new faces.) His shoes fitted, he was placed on the floor; he ran up and down the aisle, staring at his new shoes. He was given a balloon, and for the duration of the car ride to the photographer's (fifteen minutes), he tried unsuccessfully to blow it up. (He did not repeat any words I had used in my demonstration and explanation of the art of blowing up a balloon.)

At the photographer's A. watched with interest as the photographer prepared his equipment, approximately fifteen minutes. He said nothing. He neither repeated after me nor the photographer. He was seated on a platform, and immediately began to squirm and wiggle. The photographer gave him a stuffed animal rabbit to play with while trying to get him into a proper position for a photograph. He repeated, "rabbit," after the photographer, and then began to say, "Hi, rabbit. Hi, rabbit." When the photographer was ready to take the photo, and attempted to take the rabbit from A., A. shrieked, "no, my; no my," and would not let go of the rabbit. ("my" meaning 'mine'). The photographer finally took the rabbit and played a game of peek-a-boo with A., and the photo was taken. Upon leaving A. said, "bye-bye."

For several weeks now A. has only uttered, "ɔ:'gɔn" (all gone?) as a question; today he spotted an empty glass on the night table, and emphatically said, "ɔ:'gɔn" (all gone!)

We were out for a mid-afternoon ride, and while looking out the car window, A. saw a dog running down the sidewalk; he pointed and exclaimed, "ti'ʃjɛ̃" ('petit chien' = small dog), after which his father answered, "Oui, c'est un petit chien." (Yes, that is a small dog.). Again, A. said, "ti'ʃjɛ̃" ('petit chien' = small dog.), and imitated, "ɦau ɦau" ('ɦав-ɦав' = woof-woof). I interjected with, "Так, то песик." (Yes, that is a dog.); A. repeated, "песик" (dog).

A. was off to bed and in father's arms at the top of the stairs; before anything was said, he began waving down to me in the living room, saying, "'ba:ɣitʃ dɔ'ba:ɣitʃ" ('добраніч' = good night). I said, "добраніч" (good night), and A. repeated, "dɔ'ba:ɣitʃ" ('добраніч' = good night). Then father said, "Bonne nuit, maman." (Good night, mamma.); A. repeated,

"ɔn'nɔi, maman" ('bonne nuit' = good night, mamma), and immediately afterwards said, "dɔ'ba:ɲitʃ" ('добраніч' = good night).

2 years, 3 days. Januray 23

Mother's Accounts

Father took A. out of bed this morning and brought him into our bedroom where I was still in bed. A. caught sight of me, pointed and said, "nana" (daddy). Father said, "Non, c'est maman." (No, that is mamma.) A. repeated, "maman" (mamma). I said, "мама" (mamma), and A. repeated, "мама" (mamma).

While playing with his animals before going down for breakfast, A. uttered a string of words in English. The longest combination, we have heard thus far, was: "hi, hwas'dæt, puppy, hi" (what's that?). There was, in fact, no dog among his stuffed animals, only a rabbit and a bear. A. refers to most every animal as "puppy," even though he has repeatedly heard the respective names for numerous animals in all three languages. As A. and I were ready to come down the stairs together, I ready to count the first step, as we often do count each step: A. said, "один" (one), simultaneously with me as we hit the first step, and then I said, "два" (two), as we hit the second step, but instead of repeating 'два' as he has always done before, he said, "три" (three), in anticipation of the third step; and so continued to say the number before taking each step all the way down to ten. The rules of the game had changed. My compliments of praise pleased him, as was obvious by his squeals of delight.

A. played with a ping pong ball all around the house for close to an hour this afternoon; rolling it, bouncing it, and chasing it trying to catch it on the rebound. He finally lost it where I could not reach it

behind the stove; so I gave him a golf ball as a substitute. He was not very pleased with the exchange; it did not bounce like the ping pong ball. He played with it for only several minutes, and dropped it to play with something else. He began to play with a toy that if tipped upside down and brought back to an upright position again, makes the sound of a cow. One must tilt the object back to an upright position very slowly to drag out the sound 'mooo.' He experimented for several minutes before figuring out that he must tilt it back up slowly. He was very pleased with the discovery. It turned into an amusing game. He would alternate between tipping it quickly for 'moo' and slowly for 'moooo.' He frequently imitated the sound, but kept referring to it as a "puppy." I spoke to him; he repeated nothing. He played with the toy for almost fifteen minutes.

A. and father went outdoors to play. They met a French speaking couple with their eight month old baby. Father told A., "Dit, bonjour." (Say hi.); A. said, "hi." A. walked over to the baby, and father said, "Fais, dou douce." (pat gently). A. stroked the baby's cheek gently and repeated, "dou douce." (gently).

A. associates 'dou douce' with gently stroking someone's face as well as doing something gently or slowly. Later in the day A. took four small stand-up wooden dolls for a ride in a wagon all around the house, saying, " лялі " (dolls). (Up till now, for several weeks, he had only used the singular ' ляля'.) He became very frustrated every time a doll fell off the wagon and he could not squeeze it back in among the others. He would run to me, whining and repeating, " tata " ("tata " uttered for the first time; meaning unknown).

He enjoys sorting, organizing, and stacking cans of food in the kitchen cupboards, as well as taking them one by one into the living room, placing them on the coffee table and then back again into the cupboards. Today, however, he put all the cans on the coffee table, and once all the cans were placed at one end of the table, he began to slide each can, one at a time, toward the opposite end of the table. He carried this out very hurriedly, uttering a stream of expressive jargon throughout the entire manoeuvre. The only words that were comprehensible to me were the numbers "three, six, nine." It would appear that he was imitating a cashier at a grocery store; we had, in fact, been to the grocery store just yesterday. He spotted his new shoes in the corner of his room, pointed, and said, "ε ε, my, my," obviously wanting his house slippers replaced with the new shoes ("my meaning 'mine). His physical actions demanded they be put on his feet. I asked him several times, "Хочеш носити нові черевички? " (Do you want to wear your new shoes?), to which he acknowledged with only a nod of his head. I put them on his feet and he continued to play, frequently looking down at the new shoes in admiration.

A. began watching two boys, approximate ages four and five, playing in the snow outside our living room window. The boys were yelling loudly at each other. A. watched and listened intently, and then broke out in extremely loud, angry gibberish, in imitation of the boys. He saw his boots in the hall closet, picked one up, and said, "shoe, shoe." I pointed at the boots and told him, "То твої чоботи."

(Those are your boots.). He said nothing.

A. learned how to wind up his music box today. He has made the occasional unsuccessful attempt for several months. Today he dug it out from the bottom of his toy box, and on his first attempt, wound it up a bit. He grinned with pleasure, and played with it for close to twenty minutes.

Proof that he was deliberately searching for the music box was clearly exhibited by the manner in which he was throwing and flinging things very hurriedly out of the toy box until he found the music box.

A. sat on the couch and clapped his hands every time he wound up the music box, listening through to the end of the melody, with exclamations of "jeɪ: je:j." He occasionally got up and danced: swinging from side to side, bouncing, and sliding to the beat of the music.

I reinforced his actions with, "Танцуй, крутись."

(Dance, turn yourself around.).

He uses his left hand to wind up the music box. While watching the rotating cartoon illustrations on the box, he would ask, "hi, haɹ'ju" (how [are] you?). He dropped his music box to get his guitar, on which he plucked the strings and sang, "u:u:u:ju:ju:ju:." He often hears his father sing an English song with the words 'passin' through ... you.' It appears to be A.'s favorite; when he sings, it's most often in imitation of this particular tune and lyrics.

Ten minutes later he returned to his music box.

A. carried his cup of juice ever so carefully from the kitchen to the living room. After drinking all his juice, he asked for more, " a: a: " handing me his cup.

He would not answer the question "Ти хочеш більше соку?"

(Do you want some more juice?).

Within a half hour, while playing with a rubber ball, I heard him saying, "сік, сік " (juice, juice); ("сік, сік " was spoken on his own initiative; it was not an immediate echoing).

A. repeated the word " чинай " (wait) for the first time.

Getting A. to take a nap was the usual ordeal; he screamed and kicked. Once placed in his crib, he alternately clung to me and pushed me away with his left hand. On the first push he said, "go "; ("go" was spoken for the 1st time in my presence).

I put two books and a rabbit in the crib, which he immediately, very angrily, threw out of the bed. After getting him interested in a book, I left the room.

As always, he jabbered, shook and kicked his crib, and screamed at intervals. When A. is tired he becomes most irritable and cranky.

He carried on for an hour before falling asleep.

I watched him through the keyhole. As expected,

he layed himself stomach down, remained silent for only several seconds, then began saying, "no, no," jumping up to a standing position, shaking the side of the crib, before laying back down again. He repeated this several times.

After his nap he was given some juice; he repeated, "merci" (thank you) after his father, and "'a:kuju, ciu" ('дякую') (thank you, juice) after me.

A. saw me open the oven, and on his own initiative said, "'katʃε" ('горяче' = hot). He learned the meaning of this word well when he burned his finger on a lit cigarette sitting in an ash tray approximately seven months ago; this word was one of his first actively spoken.

A. was in and out of the living room while a tennis match was being broadcast on television. He often repeated numbers and names that he heard.

A. and father were playing; the ball was spinning on the floor, and A. said, "'kutʃjə" ('крутится' = spinning). Father said, "Oui, ça tourne." (Yes, it is spinning.). A. remained silent.

A. answered two of father's yes/no questions with "yes." Father asked, "oui?" (yes?); A. answered, "yes."

I was sitting on the sofa resting a glass of milk on my leg. A. came over and immediately began shaking my leg, watching the glass. He seemed pleased at the sight of the milk shaking inside the glass.

(Seeing my glass obviously called to mind his experiment the previous day with his cup of juice. Today's move toward action was intentional.)

Father put A. in the tub. A. pointed at his navel and said, "'putʃik" ('пупчик' = navel). A. looked at the toilet and said, "pipi" (pee-pee).

A. will almost always say "pipi" in French, stressing 2nd syllable, when in father's presence; and "nini" in Ukrainian, stressing 1st syllable, when in mother's presence.

I entered the bathroom. A wanted a cup for his bath, pointed to it, and said, "ε ε." I asked, "Ти хочеш ту чашку?" (Do you want that cup?).

A. repeated, " 'aʃku " (' чашку ' = cup). While emptying cups of water in the bath and when the bath water was drained, A. said, " ɔ:'gɔn " (all gone).

I put A. in his crib, and he said "hi" to his collage of baby pictures on the wall. I said, "hi, діточки" (children). A. repeated, "hi, 'u:tʃi " ('діточки' = children).

2 years, 4 days. January 24

Mother's Accounts

A. awoke with his usual English greeting, "hi, haʊ'ju: " (how [are] you?). He picked up the alarm clock in our bedroom, held it to his ear and said, " тік тах, тік тах " (ticktock).

A. and I played a sort of peek-a-boo game, and he said, "ку-ку, ку-ку" (cuckoo); (" ку-ку, ку-ку " (cuckoo) is what A. and I say when we play peek-a-boo games together; it has been active vocab. for A. for over a month). He also said, " kukiku. " (Possible explanations for "kukiku": one, A. may have been attempting to say 'peek-a-boo', which I have never said, but which he hears at day care; or two, he may have been playing with language.)

A. stood in front of the mirror, giggled and laughed while pulling his turtleneck sweater up over his nose and down again. This is the first time I have seen him spend a considerable period of time in front of a

mirror.

While sitting in his high chair, A. pointed to the window and said, "puppy."

No one was outside; perhaps he recalled having seen a dog through the car window two days previous.

Upon father's request, A. gave me a kiss; upon my request, A. gave father a kiss.

Father's Accounts

A. finished eating and said, "ɔ:gon " (all gone). He then said, "hi Andew," when mother was about to leave.

He said, "too," asking for biscuits. (A. heard the word 'too' spoken between mother and father several minutes previous to actively saying it himself. It's difficult to say whether he spoke the word with understanding of its meaning, or merely parroted or echoed what he had previously heard.)

A. says, "my," repeatedly when he wants something he estimates he deserves, or when he is dissappointed, frustrated, or being selfish; ("my" meaning 'mine'). He then throws things away from himself.

A. said, "wuf " (woof) when I said, "petit chien" (small dog); then immediately afterwards, "ɦau ɦau" ('ɦav-ɦav' = woof-woof).

He pointed at his helicopter and said, "kol kol " (helicoptere = helicopter).

He said, "hi," to his little dog before picking up the rope and pulling it.

He repeated, "encore" (more) and "biscuit" (biscuit perfectly.

He designated his little dog as, "ɦau ɦau" ('ɦav-ɦav' = woof-woof), when picking it up.

He plucked on his guitar and 'sang' in tune.

He climbed onto the chair and peeked into a glass to see whether there was anything left inside. He handed me the empty glass and said, "encore" (more).

As I was pouring some Pepsi into the glass, he watched and said, for the first time, "jus" (juice).

He is very precise in kicking the ball to me.

2 years, 4 days. January 24

Day Care Accounts

A. gets very angry when he does not get his way. He likes to take toys away from the other children and run off with them. (Perhaps A.'s display of anger outside the home is partly due to frustration in not being understood in his use of French and Ukr. His utterances are mixed and mostly unintelligible to unilingual English speakers.)

2 years, 5 days. January 25

Mother's Accounts

A. awoke very cranky; he slept less than usual. He insisted on taking his rabbit to day care. We walked into the center where he was immediately greeted with, "Oh, what a nice rabbit, Andrew. Kiss the rabbit." A. took his rabbit and kissed him passionately on the nose.

Today A. spoke the following words to me: "puppy"; "yes" ("yes" was spoken for the 1st time in my presence); "encore" (more); "my" ("my" meaning 'mine'); "ɔ:'gɔn" (all gone); "oopsy" while deliberately falling off his wagon; and " ɸe " (fe) designating something that was soiled.

This evening we visited friends who have a dog. A. was overwhelmed with excitement! A. was chasing the dog around the house, calling, "puppy, puppy, puppy." He also said, "песик" (doggie) a few times.

Later in the evening when the puppy had retired into another room, A. asked, "Де песик?" (Where's the dog?).

Uncle Cliff gave A. a cup of juice. When A. finished his juice he said, "о'гон" (all gone).

Cliff asked, "more?" A. answered, "more." Cliff asked, "juice?" A. answered, "us" (juice).

After finishing his second cup of juice, A. handed the cup to Cliff and said, "more" [pause] "us" (juice).

Auntie Kathy spoke to A. in Ukrainian. A. understood every request and physically responded and acted accordingly, and acknowledged her questions with a nod of the head, either yes or no; he did not, however, repeat or say anything.

2 years 5 days. January 25

Day Care Accounts

A. won't let any other children play with his rabbit.

He jabbars speedily, alot; we cannot understand him. For Jimmy, he says, " 'jimi."

He calls a doll a "baby."

He enjoys music. When playing records he takes one of the other children's hands and dances around.

A. scolds when he is angry; his two favorite words when he is angry are "no" and "don't."

He often hides his face in his hands when he has been scolded or when he is crying.

2 years, 6 days, January 26

Mother's Accounts

A. awoke with usual English greeting.

He unsuccessfully attempted to fit his lego blocks together, and became very frustrated. With my aid he mastered the task, and then played on his own for a half hour.

Father brought A. home from daycare, and I arrived home when A. was being changed for bed. I no sooner stepped into the room, and A. spontaneously broke into a lengthy stream of expressive jargon, none of which I understood, with the exception of his initial words "mommy, mommy, mommy." (This is the first time he has called me "mommy.") I spent fifteen minutes with him, listening to all he had to tell me. He clung to me the entire time, and was reluctant to be put to bed.

2 years, 6 days. January 26.

Day Care Accounts

A. was being very naughty this morning. As I was scolding him, another little boy said A. was "a very bad boy." A. repeated, "bad boy."

A.'s feelings are hurt very easily.

We have several round foam pillows which A. enjoys stacking on top of each other, then knocking them down; the children find this very amusing and always laugh.

When A. is happy about something, he claps his hands and laughs.

2 years, 7 days. January 27

Mother's Accounts

A. greeted father at day care with "'dēdi 'dēdi" (daddy). He misused the word ' дай ' (give). He said, " дай " (give) instead of 'на' (here) when handing me his cup.

Father was sitting on the floor, wearing a navy blue turtleneck which was bunched up under his neck. A. ran over and began pulling the sweater up over father's face up to his nose. (It would appear that either one, A. recalled his own actions before the mirror several days previous, or two, he associated his navy blue scarf with dad's sweater; the way dad's sweater was bunched up may have reminded A. of the way his scarf is wrapped over his face up to his nose and around his neck.)

2 years, 7 days. January 27

Day Care Accounts

When A. came in this morning, he pointed to the window and said, "snow." He loves to look out the window and point at things outside.

2 years, 8 days. January 28

Mother's Accounts

Father picked A. up at day care. As he often does, he told A. "Dis au revoir." (Say goodbye.). A. waved to all and said, "bye-bye." One little girl, who overheard the French, turned to A. and said, "Au revoir, Andrew." A. acknowledged her with, "о'vwΛ" ('au revoir' = goodbye).

While playing with his father, A. said, "musique" (music), on his own initiative.

A. hurt himself, came to me and said, "бyбa" (sore). I asked,

"Буба? Ти маєш бубу?" (A sore? Do you have a sore?). He immediately ran to father and said, "буба" (sore). Father asked, "Tu as un bobo?" (Do you have a sore?). A. answered, "un bobo" (a sore). He then returned to me and said, "un буба" (a sore). I then said, "Буба. Ти маєш бубу." (A sore. You have a sore.). A. replied, "un буба" (a sore), and ran off. (This is the first time A. coupled "un" with "bobo". It is interesting to note that A. also paired French "un" with Ukrainian "буба"; Ukrainian does not possess articles.)

A. likes to place the hassock face down on the floor and rock it holding two of the four legs. Today when he placed the hassock face down, instead of rocking it, he stepped onto it and began jumping off, landing on both feet simultaneously, and continued to jump forward a few extra hops with every attempt.

2 years, 8 days. January 28

Day Care Accounts

A. was not in very good spirits this morning. He was unsuccessful at most everything he tried to do, and got very angry.

When I gave him juice and crackers, he said, "'taen'kju"(thank you).

He enjoys watching T.V., especially 'The Friendly Giant'.

For lunch he had a large bowl of soup, two sandwiches, and a glass of milk.

A. loves music and enjoys playing with the Fisher Price Radio. He says,

"'reɪ' i' ʔou" (radio).

He loves to make up songs and sing.

He was telling us that one of the children was "ɔ:'gon" (all gone);

('ɔ:'gon " has been used so far only in connection with objects).

A. handed me a toy today and said, "here."

He loves to eat "cracker."

He listens to music and says, "music."

2 years, 9 days. January 29

Mother's Accounts

While sitting in his high chair this morning, A. pointed to the window and said, "puppy, puppy." There was no dog outside.

He saw a toy on the floor and said, "look, look."

He refused to sit on the training potty. He screamed his refusal and ran all over the house, answering my question of whether he had to go, every time, with, "no!"

A. saw me put my coat on, grabbed his coat, dragged it on the floor over to me and exclaimed, "bye-bye!" This is the first time A. has dragged out his coat to tell us that he, too, would like to go out.

While seated for lunch he said, "Andrew" in context of expressive jargon. (This is the first time I've heard him say his name.)

Later in the day A. sat on the potty, but did nothing. After several minutes he got off, and as always, pointed to the potty and said, "кака" (feces).

I told him, " Там нема нічого. Ти не зробив каку."

(There's nothing there. You didn't go kaka.). He said nothing.

A. spotted his tricycle in the storage room, became very excited, and insisted that I take it out by repeatedly demanding, "εε." I asked him several times, " Ти хочеш свій ровер? " (Do you want your bicycle?).

His only answer was, " εε." I brought out the tricycle.

A. attempted over and over to get the tricycle in motion, but was unsuccessful. As in his past attempts, he became very frustrated, jabbering in a complaining tone. After a half hour he suddenly left his tricycle and went directly to his horse-on-wheels. This he manipulates well; he obviously needed to compensate for his lack of success with the tricycle. He took pride in 'showing off' his skill to me. After a few minutes, he suddenly jumped off his horse, ran directly over to his tricycle, and squeezed the rubber bulb horn with both hands. And to his surprise, it honked. He jumped up and down with squeals of joy, honking the horn over and over again.

(He received the tricycle as a Christmas gift, at which time he unsuccessfully attempted over and over to honk the horn. At that time he tried to squeeze the bulb with one hand and with both hands. Today, his first attempt was with both hands. He was so pleased with himself, jabbering all the while.)

When a friend arrived for a visit an hour later, he immediately went to his tricycle to show her how he could honk the horn. When father arrived home a half hour after, he did the same.

While having dinner, A. in his high-chair, mother and dad at the kitchen table, A. pointed at our napkins on the table, insisting, "εε," that I give him one also. I told him, " То сарветочка. Ти хочеш сарветочку?" (That's a napkin. Do you want a napkin?). He repeated, " 'vetka" ('сарветочка' = napkin), and was given one. A repeated the nominative form " 'vetka" (сарветочка), which was not the form he heard just prior to speaking; " сарветочку " is what he heard. One, either it is not that the accusative ending is more difficult to learn, retain, or

repeat, but rather that the 'three word utterance' itself is what is difficult; or two, the initial emphasis on the word which defines the object is more readily retainable, in this instance, the initial two word sentence spoken by me. I always wipe him clean after his meals; I have never given him a napkin to do so himself. After supper he wanted a box of kleenex. He pulled one tissue out, pretended to blow his nose, walked over to the storage space beneath the sink, opened the door, and threw his tissue into the garbage bag, saying, "ϕe, ϕe " (fe) several times.

2 years, 10 days, January 30

Mother's Account

A. awoke speaking his usual English greeting. He appeared to be most dissatisfied today. He stood in front of his huge toy box, wanting this taken out, then that, pointing at I didn't know what. He was not satisfied with anything that was taken out for him. Not until everything was taken out of the box and strewn all over the floor, did he quiet down. It was precisely 'everything' that he wished taken out of the box. While standing at his box, he whined and whimpered, and kept saying, "oh 'dɛdɪ ." (The meaning of "dɛdɪ" is unclear. It is difficult to say whether it was his daddy that he wanted, or if it meant 'help' or perhaps daddy's help. He uttered this same combination on one other occasion, shortly before his second birthday, at which time he was also feeling dissatisfied and frustrated.)

By evening I was very conscious of the fact that A. was consistently repeating not just one word after me, but singling out two consecutive

words and repeating the combination. For several months A. has predominantly repeated only one word in both Ukrainian and French, and his active Ukrainian and French vocabulary also consists of mostly one word utterances or holophrases; two word sentences have been most infrequent. In English, however, I have heard him speak up to three-word combinations.

A. insisted on being given a napkin again today, and, on his own initiative, asked, "'vɛtkɑ" ('сарветочка' = napkin).

At bedtime I was telling A., "Ти маєш один зайчик." (You have one rabbit.) He immediately responded with, "два" (two). (His saying "два" (two) here, I believe, was not intended to mean that he has two rabbits (one at home and one at school), but rather in expectation of our counting game. The word 'один' (one) may have been the key word to trigger off the association.) Then I repeated, "два" (two) and he said, "три" (three). Together we began to count his fingers:

"один, два, три, чотири, п'ять" (one, two, three, four, five).

Then father joined in for a minute. He counted A.'s fingers in French, and A. repeated: "un"; "deux"; "twa" ('trois'); "kɛt" ('quatre'); "sɛ" ('cinq'). Father left.

There was a pause of several minutes, and A. counted his fingers in Ukrainian, "один, два, три" (one, two, three).

A. saw two photos of himself lying on the night table, pointed and said, "'kikɔ" ('Андрійко' = Andrew).

Upon being put to bed, A. on his own accord, said, "'ba:ɲitʃ" ('добраніч' = good night) to me.

2 years, 10 days. January 30

Father's Accounts

A. always catches a ball rolled toward him on the floor, but still has difficulty catching a ball when thrown to him in the air. When rolling a ball to him, he stands facing you, waiting for it; when it starts to roll, he quickly bends his knees, cups his hands, and very accurately catches it either by letting it roll into his cupped hands or attempting to scoop it up prematurely.

A. came over to me, and wanting me to accompany him, took my thumb and pulled on it, saying, "pouce" (thumb). (The reason for A.'s direct utilization of French may be due to the fact that the adequate term is unknown to him in Ukrainian or English.)

He slightly injured his knee, came up to me, and said, "буба" (hurt, sore). I kissed his knee and said, "Le bobo va partir." (The sore will disappear.). He sat down and kissed his knee.

2 years, 11 days. January 31

Mother's Accounts

A. awoke in a cranky mood. He moaned and groaned, and said nothing at first. Then, suddenly, he pointed to his toy box and asked, "'tʃɔtɔ" ('шО ТО?' = what's that?). (Up until today, he has always pronounced 'шО ТО' as "tɔ'tɔ.") I was very surprised to hear Ukrainian spoken first thing in the morning; it is rare.

He soon began to pick up his animals and said, "Hi, haʊ'ju: 'udeɪ:" (how [are]you?). (I believe he was trying to say 'today'. Upon arriving at day care he is frequently greeted with. 'Hi, how are you today?' This is the first time he has attempted this word in my presence.)

A. was eating supper and with every half cup of juice consumed, he repeatedly stated, "ɔ:'gɔn ɔ:'gɔn"(all gone), changing inflections, tone, and stress as if he were experimenting with the utterance, or perhaps consciously trying to imitate the various ways he hears it spoken at daycare.

He did not care for the food served him for supper, and began whining and saying, "oh,'dɛdi; [pause]'dɛdi." (He was not looking at daddy, which leads me to believe that this utterance is not a reference to 'daddy'. As for this utterance meaning 'help', it does not appear to apply here. I am uncertain as to what he meant to convey.)

A. has become a master at turning the knob on his music box.

We noticed something most interesting today: A. always throws a ball with his right hand, everything else he manages with his left hand.

He saw a picture of a guitar in the newspaper, which was lying flat on the table. He began to run his fingers over the strings, swaying his body back and forth, and singing away incomprehensibly. Then he noticed a picture of a bird on the guitar, pointed at it and jabbered away.

A. was off to bed with father, and yelled to me, "'ba:ɲitʃ"('добраніч' = good night). Father said, "Dit bonne nuit, maman." (Say good night to mamma.); A. repeated, "ɔn'nʊj, maman" ('bonne nuit' = good night, mamma). Then after a short pause, he said, "ɔn'nʊj, maman" ('bonne nuit' = good night, mamma).

A. was playing ball in the hallway. By accident, he turned up the corner of the rug with his foot. He bent over and examined the rug carefully, holding it with both hands, turned up a bit. With great emphasis he

exclaimed, "фе, фе!" (fe!), and again, "фе, фе!" [pause] "кака" (fe, kaka). There was lint attached to the bottom of the rug.

Before bed I asked A. "Чи ти хочеш пити соку?" (Would you like to drink some juice?). He turned and ran into the kitchen. I gave him a cup of juice and said, "На, сік." (Here, [is some] juice.). He said, "сік, ус" (juice, juice), and again, "сік, ус" (juice, juice). I said, "Так, це сік." (Yes, this is juice.). He ran off.

Day Care Accounts

When A. came in this morning, he said, "Hi, Mary." He then tripped over her, and said, "whoops."

He played quite well with the other children today.

When we put him into bed for his nap, he settled down quite well, but does jabber a bit before deciding to sleep.

2 years, 12 days. February 1

Mother's Accounts

A. spoke a new word this morning, "hi, da:i" (dolly), pointing at a doll in his toy box.

His use of "на" (here [it] is) and "дай" (give me) was correct today.

He now consistently says, "papa" (daddy) whenever he hears father: washing in the bathroom, walking through the house, etc.

While A. was eating breakfast, he heard father in the bedroom just above, pointed to the ceiling, and said, "papa" (daddy).

Every time he wanted my attention today, he would point to the object of reference and say, "ʔuk" (look). A. was watching me closely as I spoke, interrupting with, "hi, hi."

I telephoned A.'s grandmother; I handed A. the receiver, he listened very

intently, but said nothing. As soon as I retrieved the receiver, he began shouting, "hi, hi."

2 years, 12 days. February 1

Day Care Accounts

I asked A. if he had to go potty. He replied, "Andrew, pee." I took him to the toilet, and sure enough, he went.

When one of the other children bumps into A., he looks around and says, "don't."

Jilline was brushing her hair; I said, "pretty, Andrew." He repeated, "pretty, Andrew."

He appears to catch on and repeat different words very quickly.

A. unintentionally knocked another little boy over, and when Jimmy began to cry, A. patted him on the back and said, "I, sorry."

2 years, 13 days. February 2

Mother's Accounts

A. was tired and hungry when I picked him up at day care; he retaliated against getting dressed for home with, "no, no."

I drove to university and parked in front of the library where we were to wait for father. We came here to wait for father only once before, two weeks ago. As soon as I parked, A. became very excited and kept saying, "papa, papa" (daddy). After several minutes of waiting, A. spotted father running toward the car, and began to jump up and down in his car seat very excitedly, shouting, "papa, papa" (daddy).

While watching students walking to and from classes on campus, he pointed at a group of young girls and said, "Oh, nice." (This is the first time he has said "nice" in my presence.)

Father's Accounts

A. pointed at my glass of Coke, picked it up and said, "coca" (Coke). When I took the glass away from him, he retaliated with "my." I gave him a cup of Coke; and when he drank it he said, "âkɔ'k, æ" ('encore coca' = more Coke). He was watching me as I lit a cigarette and said, "fum" ('fume' = smoke).

2 years, 13 days. February 2

Day Care Accounts

A. was playing peek-a-boo, what he calls "boo," around the corner with Jimmy, and said, " I 'si:u"(see you).

He would not let the others play with the ball, and kept insisting, "my ball."

A. was watching T.V. A face was drawn on a head of cabbage; he pointed and repeated, "cabbage."

A. loves to ride the small cars we have here. He often waves and says, "byè."

He pointed to the picture of a horse on the wall and said, "horsie."

2 years, 14 days. February 3

Mother's Accounts

A. slept poorly last night, awaking and crying several times. He awoke earlier than usual and really began to shout. When I went to him, he was most happy to see me. He did not greet his animals. Most of what he said this morning was in Ukrainian: "'tʃɔtɔ" ('що то?'= what's that?); "мий-мий" (wash up); "сік" (juice). (A. sought my utmost attention this morning. It would appear that he also knew how to get it, by speaking Ukr., which might explain why he spoke more Ukrainian than usual. His overall behavior may have been the result of not having been with me very much yesterday. Although, we cannot omit the possibility that physical reasons could have been the cause of a restless night's sleep, resulting in the need for mother's comfort and security this morning.)

He insisted on being held and carried, refusing to walk up and down the stairs by himself. I even had to prepare breakfast with him in my arms. He played with his stuffed animals before leaving for day care. He held them and rocked them. His expressive jargon was quite lengthy. He refused to get on the potty and responded with, "no, no," shaking his head in negation simultaneously.

When it was time to leave, he did not want to go, and gave me a physically hard time while trying to dress him.

A. saw a dog outside the day care center, and became very excited, saying, "песик, песик, puppy" (doggie), several times. After my verbal reinforcement of the word "песик" (doggie), A. dropped the word 'puppy' and exclaimed, "песик, песик" (doggie).

We went to Kathy and Cliff's for dinner this evening. We no sooner stepped in through the door, and A. began shouting, "песик, песик" (doggie), visually searching in all directions. The dog finally appeared and A. was ecstatic. Ukrainian and English were spoken among the adults all evening.

From the moment we arrived, A. approached his aunt and uncle warmly and made himself right at home. When A. wanted more to drink he knew precisely whom to approach. He repeatedly gave his empty cup to his uncle Cliff and asked for "more."

A. often said, "puppy," while playing with the dog alone and while jabbering away with his aunt and uncle.

With me, however, he consistently said, "песик" (doggie).

A. came to me, hands on his bottom, and said, "un буба" (a sore).

I asked him, "Андрійко має бубу?" (Does Andrew have a sore?).

He answered, "un буба" (a sore). (He combined the French article "un" (a) with the Ukrainian word "буба" (sore).)

Then he said, "фе, кака" (fe, kaka).

I changed him; his bottom was red and sore.

Toward the end of the evening, to our great pleasure, he addressed his aunt and uncle: "ton ton tif" (uncle Cliff); "'fesi" (Kathy).

(A. apparently attempted the French pronunciation of 'Cliff', the way father pronounces this name.)

A. had a cup of juice: he approached each of us, one at a time, clinked his cup against each individual's glass, and said, "стук" (clink). (At home the 3 of us clink glasses and say, "стук" (clink); and during our previous visit to Kathy and Cliff's, A. watched us all

toast many times, but did not do so himself.) A. knew this would draw a lot of attention. (Father has borrowed the Ukrainian word "CTYK " (clink) as has Cliff.)

On request in all three languages, A. kissed his aunt and uncle good night.

2 years, 14 days. February 3

Day Care Accounts

When A. came in this morning, the first thing he said was, "Hi, Dorothy."

Today when I was changing A.'s diaper, I asked him if he was wet. He felt his diaper and said, "we" (wet).

2 years, 15 days. February 4

Father's Accounts

A. did not go to day care today; instead, he spent the day with me at university.

A. thoroughly enjoyed the bus ride and walk around campus, greeting most every passer-by with, "Hi, haʏ'ju:" (how [are] you?).

With everyone I spoke to, A. would bid farewell with, "bye, see-you"; (see-you is being pronounced correctly).

We spent some time visiting a friend on campus, who A. sees periodically, and who speaks to A. only in Ukrainian. He was showing A. various objects and naming them. A. appeared fascinated with a painting of a house, on the wall. Our friend would ask, "Що це?" (What's that?); A. would repeat, "'ʃɔsɛ" ('Що це?' = What's that?).

Our friend would say, "Це хата. " (This is a house.);

A. would repeat, "хата" (house).

After a pause of approximately fifteen minutes, our friend pointed to the painting and asked A., "Що це? " (What's that?); A. immediately answered, "хата" (house).

A. enjoyed running up and down the halls in various buildings. He played shy with friends of mine whom he had never met before.

2 years, 15 days. February 4

Mother's Accounts

When I arrived home, A. greeted me with open arms, excitedly jabbering away, as if trying to tell me all about the events of the day, not a word of which was comprehensible.

In the evening the phone rang, A. ran into the kitchen toward the phone, and said, "фон" ('телефон' = telephone). (To my knowledge, A. has never heard the word "фон." It appears to be a shortened version of the Ukrainian word "телефон" , and could be interpreted as a transfer from English into Ukrainian.)

2 years, 16 days. February 5

Mother's Accounts

A. now blows on his spoonfuls of hot food before consumption. He either gets his cue from me when I tell him his food is hot, or he tests the temperature of his bowl by placing both hands on the sides of the bowl.

Kathy called; A. insisted on holding the receiver, listened, but said nothing.

He dragged his tricycle out of the storage room; he went through the usual frustrating routine of trying to ride it. He cannot pedal, but is improving at pushing himself along with both feet on the floor.

He honks the horn quite often now.

A. listened to several Ukrainian records, to which he joyfully danced around the room clapping his hands.

A. answered "yes" to several questions posed by both mother and father today.

While alone with father in the kitchen, A. handed him his empty cup, and asked, "more." Father looked at A. and remained silent; A. immediately said, "âkɔ" ('encore' = more). Father asked, "encore?" A. answered, "âkɔ" ('encore' = more).

Father put A. to bed; every time father said, "bonne nuit," A. replied, "ba:ŋitʃ" ('добраніч' = good night).

A. made greater use of his active vocabulary today.

The following words were spoken in my presence:

"Hi, haʊ'ju:" (how [are] you?)

"Bye, see-you."

"ɔ:'gɔn" (all gone)

"ʔuk" (look)

"fe" (fe)

"kaka" (kaka)

"pesik" (doggie)

"ɦatʃɛ" ('гаряче' = hot)

"papa" (daddy)

"my" meaning 'mine'

"no"

"[?]ont" (don't)

2 years, 17 days. February 6

Mother's Accounts

A. is becoming very affectionate with his stuffed animals. Today he insisted that his bear join him in his high chair for breakfast. He repeated my words more often than usual, turning to his bear as if he was an instructor teaching his student the vocabulary.

He brought out his tricycle again today, and appeared to be less frustrated in trying to ride it.

He refused to sit on the pot.

Once, when his diaper was wet, he told me, "кака " (kaka).

Having his diaper changed is a process he dislikes tremendously; he screeched all the while.

After being changed he followed me to the diaper pail, all the while pointing to the soiled diaper, saying, "фе, кака " (fe, kaka).

A. is a very messy eater, and food strewn all over his table top and himself does not bother him the least bit while seated in his high chair.

But when he is up and around and his hands get dirty, he comes to me with, "εε," wanting any little bit of dirt wiped clean immediately.

He also stays clear away from his messy high chair and dirty surrounding floor space after meals, until all is wiped clean.

A. engaged in picking up pieces of lint he found by the doorway, and carried them to me one at a time, for me to throw into the garbage.

Earlier in the day he broke the door to the cabinet which houses the garbage; he had slammed it too hard several times. I was angry with

him and told him not to touch the door anymore. He obeyed this earlier request; he gave me the pieces of lint to throw into the garbage for him.

Father was taping some music; A. loves to sit with the headphones on, and rock back and forth to the music.

I opened the refrigerator and A. spotted a bottle of Coke. He had a temper tantrum when I told him he could not have any.

A. saw me putting my boots on; he got his snow pants, and shoving them in my face, said, "bye-bye."

I was blocking entry into the closet where his boots stood; he gently pushed me aside and said, "u:v" (move).

Father was leaving and said to A., "au revoir" (good bye).

A. responded with, "bye-bye." Father walked out the door, and several times A. said, "o'vw^" ('au revoir' = goodbye).

A. saw me cooking, pointed and said, "h^atʃε" "soon, soon" ('гаряче' = hot). I said, "Так, це гарнчий суп." (Yes, this is hot soup.); he said, "soon." (It is difficult to say whether he was attempting to say the Ukrainian word 'суп' (soup), or English 'soup', or 'soon' for 'soon we will eat the hot soup').

For several weeks now A. cautiously walks around the house carefully holding his cup of juice or milk with both hands, taking ever so small steps. With this exception of walking with his cup, it's rare to see A. walking; he runs most of the time.

A. discovered he can roll the ball down along the side panel of the stairway. Father sat at the bottom of the stairs, A. sat half-way up (six stairs up) the stairway, and they played at rolling the ball down the panel for close to fifteen minutes. A. was ecstatic.

A. accidentally pulled apart his toy camper. He took the camper off the truck, then sat down on it and attempted to ride it around, pushing himself forward with his feet. He was thrilled.

After his nap A. refused to eat supper in his high chair. He insisted on sitting on father's lap and being fed by mother. He sought a great deal of attention after supper, and the three of us played together for the entire evening.

A. fought and screamed, resisting being put to bed for the night, as though he knew he would be off to day care tomorrow, apart from mother and father.

2 years, 18 days. February 7

Mother's Accounts

A. slept badly last night. He began to cry at 5:00 A.M. I took him out of his crib, held him and walked around the room, trying to comfort and soothe him. I tried giving him some water, which he plainly refused with, "no." I asked, "Що є? Що болять? Де болять? Ти маєш бубу? Андрійко має бубу?" (What is it? What hurts? Where does it hurt? Do you have a sore? Does Andrew have a sore?)

He answered, "буба, буба" (sore) with his hand on his bottom.

(I only used the accusative case "бубу"; A. answered in the nominative case "буба.")

I changed him and powdered his red, sore, bottom.

I walked him again, then tried to put him back into bed; but he shouted and screamed, his arms clinging to my neck. He finally calmed down and I put him to sleep.

He awoke in a cranky mood, whining and whimpering when I took him out of his crib. He told me, "буба, буба" (sore). I changed him.

He insisted on being held while I prepared his breakfast.

When breakfast was ready, I put him in his high chair.

He ate well.

During breakfast, father phoned. I handed A. the receiver. Father said, "hi, hi." A. immediately responded with, "hi, hi," smiling from ear to ear. (Occasionally both father and mother use the Engl. words "hi" and "bye" in speaking to A.)

Then father said, "Bonjour, bébé." (Hello, baby.).

A. said, "hi." Father talked a bit to A., then said, "bye-bye." A. said, "bye-bye." Father said, "Au revoir, bébé." A. answered, "о'vw^", bye-bye" ('au revoir' = goodbye). (In answering father, it is difficult to say whether A. meant to say "bye-bye" or perhaps attempted to repeat 'bébé'.) When I retrieved the receiver, A. became angry and began to whine. Upon hearing me say, "bye," A., too, shouted, "bye." After hanging up the phone, A. was once again smiling, and said, "papa, papa" (daddy, daddy).

A. ran into the wall this evening, and said, "un буба" (a sore).

I asked, "Буба? Ти маєш бубу? Покажи мені." (A sore?

Do you have a sore? Show me.). A. answered, "буба." Father asked,

"un bobo? Tu a un bobo?" (a sore? Do you have a sore?). A. answered,

"un bobo" (a sore).

A. wanted some Coke again today and said to me, "un coca" (a Coke).

He said, "ʹuk" (look), many times today in trying to get my attention.

A. was on his way to bed. I said to him, "Нажи добраніч папа ."
(Say good night daddy.).

Father said, "bonne nuit" (good night).

A. said, "ɔn'nuj" (bonne nuit' = good night).

2 years, 18 days. February 7

Day Care Accounts

Today when I asked A. if he was wet, he correctly replied, "wet."

(To my knowledge this is the first time he has correctly pronounced "wet.")

Later I asked him if he had wet pants, and he replied, "no."

He showed me his new "shoe." He was very proud of them. Today was the first time he wore them to day care.

2 years, 19 days. February 8

Mother's Accounts

I decided to sit next to A.'s high chair during breakfast this morning. He flatly refused to eat in my close presence. It was not until I got up and began to busy myself in the kitchen that he began to eat his porridge.

On the way to day care, A. engaged himself in conversation with every passerby he spotted through the car window: "hi, hau'ju:" (how [are] you?); "juk (pause) see" (look); ("juk" is a new pronunciation as compared to his previous "ʔuk"). (This is the first time he has paired the word 'see' with 'look'.)

A. gave father a kiss at day care upon father's request.

Father said, "au revoir" (goodbye). A. said, "ʔ'vwʌ" ('au revoir' = goodbye), then "bye-bye" [pause] "bye-bye".

Father brought A. home at the end of the day. As they were walking into the house, father was telling A. that mother was home preparing supper. As they were taking their coats off, A. said, "maman" (mamma).

A friend of ours stopped by this evening. I took A. upstairs to be changed for bed. Several times I asked A. to say "bye-bye, Lona."

At every request A. said, "bye-bye, 'anə" (Lona).

A. and I were alone upstairs for fifteen minutes before returning to the stairwell to again say farewell to Lona. Before anyone had a chance to say anything, A. said, "bye, 'anə" (Lona), "bye-bye, 'anə" (Lona).

I then asked A. to say "Добраніч, Лона." (Good night, Lona.), but A. only kept repeating, "bye-bye, 'anə" (Lona).

Lona said, "good night" and "bye-bye" repeatedly to A. (Lona speaks to A. predominantly in English, but does say the occasional French or Ukrainian word.)

2 years, 19 days. February 8

Day Care Accounts

A. kept pointing and saying, "shoes," telling us he had new shoes.

He jumped off the mattress in the play-room and said, "oh, boy, oh, boy," shaking his head. (I suspect A. was imitating his uncle Cliff.)

He repeated after me, "soup today."

He is beginning to put his words into sentences.

He is a very active boy.

2 years, 20 days, February 9

Mother's Accounts

A. spoke the following (English) words this morning:

"juk" (look); "see"; "hi, haɥ'ju:" (how [are] you?");

"ɔ:'gɔn " (all gone).

I was dressing A. after breakfast; he took his sock and said, "chaussette" (sock). (A. began saying "chaussette" on his own initiative in father's presence approximately two weeks ago. Today was the first time he spoke this French word to me.)

I, in turn, acknowledged him with, "Так, шкарпетки. То твої шкарпетки." (Yes, socks. Those are your socks.).

He again said, "chaussette" (sock), then immediately afterwards, "'ɛki" ('шкарпетки' = socks).

Father's Accounts

Approximately forty-five minutes after mother's departure, A. went to the window, raised the curtain, pointed, and said, "мама " (mamma). When the music stopped, A. said, "fini sik" ('fini musique' = the music finished). Several minutes later he returned to the stereo and requested, "ençore sik" ('encore musique' = more music).

After hearing me say "musique" (music), several times, A. began to correctly pronounce "musique" (music).

He made a convoy out of three toy trucks. After some experimentation, A. displayed more advanced skills in pushing and pulling his convoy.

While riding his horse-on-wheels, he hit a toy dog, and said, "ti'jɥẽ " (petit chien' = small dog).

Without showing any great concern, A. pointed at the damaged cabinet door, and said, "juk" (look).

He said, "jo:" ('l'eau' = water), while in his bath. (A. began saying "jo:" on his own initiative two weeks ago.)

2 years, 20 days. February 9

Day Care Accounts

A.'s shoe came off. I asked him where his shoe was and he replied, "My shoe gone." I put his shoe back on and he said, "'hæpkju" (thank you).

Chrissy was crying, A. pointed to him, asked, "baby? baby?" and laughed.

A. likes to tease the other children.

2 years, 21 days. February 10

Mother's Accounts

A. came home with father from day care, walked into the house and called, "maman" (mamma). Before entering the house father had told A. that I was home.

We turn on Sesame Street two to three times a week for A. to watch, but he has never shown any real interest, except for the occasional glance at the T.V. He appears content to play with his toys and us. He is always most enthusiastic to play with us at the end of a week-day.

Today, however, he actually sat for short periods of time and watched Sesame Street with great interest. He would point and ask, "huz'dæt " (who's that?).

Father and mother both would respond by asking the same question in Ukrainian and French, and then answering the question by naming, in English, each individual muppet.

A. did not ask his question in French or Ukrainian, but continued with, "huz'dæt" (who's that?).

He repeated a lot of what he heard on T.V.

Every time he saw a four-legged animal with big ears, he said "puppy" and "'pesIt" ('песик' = doggie) alternately, along with a "гавгав" ('гав-гав' = woof-woof).

He frequently jumped to his feet, ran over to the T.V., pointed to the muppets' noses on the screen, and said, "'nosIt, 'nosIt" ('носик, носик' = nose, nose).

A. asked for "коржик" (cookie); he asked both father, while alone with father, and mother, while alone with mother, several times. He lead us by the hand into the kitchen to the cupboard where the cookies are kept. He did not repeat father's "biscuit" as he often does. A. loves cookies, and began actively saying both the Ukrainian and French word for 'cookie' with little difficulty, several weeks ago.

He answered many of my questions with "yes" today.

Father's Accounts

A. said, "cookie" to me, but did not want one. (A. has never before said the English word cookie in our presence. He certainly hears the word spoken quite often at day care.)

2 years, 21 days. February 10

Day Care Accounts

As A. was being pulled in the small red wagon, he tipped over backwards, and said, "whoops." He climbed back in, laughed, and kept saying, "beep, beep," as he was being pulled.

He then pulled Jimmy in the wagon, and said to him, "Hang on."

A. touches his nose and says, "nose," touches his eye and says "eye," touches his mouth and says, "mouth," but he does not seem to remember what the word for 'ear' is.

He tries to repeat my words to him.

2 years, 22 days, February 11

Mother's Accounts

A. watched Sesame Street. He laughed, clapped his hands, and repeated several words. When the program ended, he ran over to the record cabinet and insisted that some music be played. When the stereo was turned on, he immediately hit the floor, and amused us with Ukrainian folk-dance steps we have taught him.

A. asked both mother and father for a " кoржик " (cookie), several times today, while alone with mother, and while alone with father. While A. was playing alone, we heard him say, "pomme" (apple). (A. said "pomme" for the first time today.)

Father approached A. and asked him if he wanted an apple; A. responded with, "no."

A. said, "no" and "my" often today. He also said, "y:v" (move), as he pushed me to the side when trying to get a toy that was on the floor behind me.

A. now stands up in his high chair to announce his having completed his meal.

A week ago A. discovered he could blow bubbles while drinking from his cup. On occasion he now blows bubbles while drinking milk, juice, or water, and laughs heartily in amusement.

With every little knock or bump, A. came running, saying either "un бyбa " (a sore) or "бyбa " (a sore), insisting that his injury be kissed.

He accidentally put his finger in a dirty ashtray, came running with finger extended, and said, "фe" (fe), insisting that I wipe his finger clean.

A. saw a couple kissing on T.V., and exclaimed, "bite."

The three of us were listening to music together; A. pointed to the stereo and said, "sik" ('musique' = music) several times.

As A. was being taken to bed by father, he yelled to me several times, "'ba:ritʃ"('добраніч' = good night), waving good night.

2 years, 22 days. February 11

Day Care Accounts

A. pointed to a picture of a dog and said, "puppy."

He repeated after me: "piggy," "cat," "cow," "ʃi:k" (sheep).

A. placed his finger on the pig's mouth and said, "piggy, bite."

David came into the room and A. asked, "huz'dæt" (who's that?).

Shuana walked into the room and A. said, "Shauna."

A. was playing with a stuffed animal, patted it on the head and said, "nice."

2 years, 23 days. February 12

Father's Accounts

The wash machine was on the spin cycle, A. pointed at the machine and said, "'kutʂjə" ('крутится' = it is spinning).

He said, "быба" (sore), pointing to his head, as if he was trying to tell me he had a headache.

He said, "more," several times today, when he wanted more food and juice.

Toward the end of the day he once said, "more сік" (juice).

I was in the kitchen and A. was sitting on the sofa in the living room; several times he called out to me, "u:i:" (Louis). (He has on occasion repeated and imitated mother calling me, but has never before called my name on his own initiative.)

While drinking a cup of juice, he pointed and said, "pomme" (apple).

A. was searching for a particular toy in his toy box. When I asked him what he wanted, he pointed and said, "ça" (that). He continued to use "ça" (that) for the remainder of the day when pointing to a particular toy he wanted taken out of the toy box. He repeated names for specific toys.

A. was pouring water from one cup into another most accurately, spilling only a few drops.

A. enjoys making objects spin.

2 years, 24 days. February 13

Father's Accounts

Mother said, "bye-bye," to A., and A. said, "bye-bye," to mother as she was leaving this morning. Immediately after mother closed the door behind her, A. yelled, "'napitʃ mama" ('добраніч' = good night mamma):

(This is the first time A. has pronounced 'добраніч' as 'napitʃ.)

A. moved his potty to the window and climbed onto it in order to have a better view out the window.

A. said, "буба" (sore), after having had his finger caught in the door, and came to me to have it kissed. I kissed the wrong finger, and A. corrected the error by himself kissing the right one.

A. raised the kitchen curtain, pointed out the window and exclaimed, "juk papa" (look daddy).

A. learned the meaning of 'ping' in reference to striking a small bell. He ran to get his bell every time I said, "ping."

A. picked up his coat and boots and offered them to me saying, "bye-bye"; he wanted to play outdoors.

While playing with his tricycle, he decided to take his bear for a ride.

Everytime it fell off, he tenderly picked it up and asked, "буба?"

([a] sore?).

Midway through his evening meal, A. said, "'a:kuju 'a:kuju" ('дякую' = thank you) [pause,] "merci, merci" (thank you). (This is the first time he has said "merci.")

2 years, 25 days, February 14

Mother's Accounts

A. said, "'a:kujʊ " ('дякую' = thank you), to me after being served both his main course and dessert at supper time.

He wanted several toys taken out of his toy box and said, "'dɛdi 'dɛdi."

He referred to every animal on Sesame Street as "'pɛsɪt " ('песик ' = doggie).

A. wanted some sauce on his meat, saying to me, "oh, 'dɛdi, sauce"; then immediately afterwards, "more, more, sauce." After asking him if he wanted more sauce, he answered, "ʃɛ " ('ще' = more).

Running all around the house, A. kept saying, "sik" (music? or juice?).

I thought he wanted "cɪk " (juice), but when I asked, he would answer, "no, sik sik". It quickly became apparent he was searching for his music box ("sik" meant 'musique' = music).

A. often said, "oh, 'dɛdi - oh, 'dɛdi" today.

2 years, 25 days. February 14

Day Care Accounts

I made Valentine cookies with pink icing for the infants today. When I gave one to A., he looked at the cookie, then at me, and said, "pretty 'tuki" (cookie), then "'hæŋkju " (thank you).

A. sits to watch the T.V. shows Mr. Dress Up and Romper Room.

2 years, 26 days. February 15

Mother's Accounts

A. said, "'а:кују" ('дякую' = thank you), several times today after being given food, toys, etc.

He said, "'рєsɪt" ('песик' = doggie), when pointing to Mickey Mouse decals on his high chair and puppy designs on his bib.

As always A. resisted being taken out of the tub after his bath. He continued to play and splash and did not notice me pull out the plug to drain the tub. He looked puzzled when he noticed the water level subsiding. When the water was completely drained, and he found himself sitting in an empty tub, he alarmingly shouted, "ɔ:'gɔn ɔ:'gɔn" (all gone), and jumped out of the tub into my extended arms.

A. spilled his milk on the floor. Pointing to the floor, I scolded him. He then imitated my actions, trying to reproduce several of the words I had spoken.

A. was intentionally practicing and playing with language: "hi, haɪ'ju:(how [are] you?) and "bye-bye", over a duration of several minutes, were spoken over and over again, with deliberate variations in speed of speech, inflections, and tone.

2 years, 26 days. February 15

Day Care Accounts

A.'s shoe came off. I picked it up and asked, "Whose shoe is this?"

A. ran over to me and said, "my shoe." I asked A. if he wet his pants and he replied, "no." I asked him if he had to go to the pot, and he answered, "pot." I took him and he went. I praised him saying,

"Andrew is a good boy." A. replied, "good boy, good boy."

A. appears to understand everything that is said to him.

A. tried to get Derrick off the chair, pushing him and repeating,

"move, move," and "my chair." (At home A. says "u:v" (move).)

When Derrick finally gave A. the chair, A. no longer wanted it.

A. likes to be held and cuddled.

When I line the infants up to enter the snack room for juice and

crackers, A. likes to be first in line. If he is not, he gets very

angry and sits down. When I tell him he cannot have his snack,

however, he quickly gets up and stands in line anywhere he is told.

2 years, 27 days. February 16

Mother's Accounts

A. said, "буба" (sore), with every minor knock and bump, wanting his wounds kissed.

He asked me for "pomme" (apple), while the three of us were seated for supper. I asked, "Андрійко хоче яблучко?" (Andrew wants an apple?); he answered, "pomme" (apple). I repeated my question; he answered, "'укз" ('яблучко' = apple). (This word was spoken for the first time.)

A. refused to get out of the tub; he saw me pull the plug, scrambled over to the drain-hole, and replugged the hole. Thrilled with the glub-glub sound of the draining water, he proceeded to plug and unplug the drain-hole.

When he finally let the water drain completely, he wanted out immediately.

He was playing with his music box, intently watching the pictures rotate as the music played. I pointed at the monkey and said, "То мавпа."

(That's a monkey.), as I have done many times before. He repeated the word for the first time. After a pause of several minutes, while playing alone, I saw him point at the monkey as it turned by and heard him say, "'mɔfə, hi, haʊ'ju:?" "ʃʊk, 'mɔfə, hi, haʊ'ju:?" "See-you, bye-bye." ('мавпа ' = monkey, hi, how [are] you?) (Look, 'мавпа' = monkey, hi, how [are] you?).

He also said, "'kʊsjə" ('крутиться' = [it's] turning), as he watched the pictures rotate. (This is a new pronunciation.)

He said, "'upsi," when the music box would tip on its side. At one point, while alone and engrossed in his music box, I heard him say the following words in succession: "maman" (mamma); "мама" (stressing the 2nd syllable); and lastly, "мавпа" (monkey). Day Care Accounts

A. took his shoes off and Allen ran off with them. A. began to chase Allen around the room, shouting, "my shoe, my shoe."

We played records and A. took a hold of Shantel's hands and danced round and round in a circle, singing, incomprehensibly, all the while.

A. tipped over on a block, looked at me, rubbed his bottom and said, "ow." He did not cry, but certainly looked quite surprised.

When Maureen leaves day care mid afternoon, A. waves to her and says, "bye-bye."

2 years, 28 days. February 17

Mother's Accounts

A. was very cranky after returning home from day care.

He complained "čyɔa" ([a] sore) on his head and right upper jaw.

He wanted comfort; I held and cuddled him before supper. He was not at all his active, usual self.

When he wanted more music played, he would point to the stereo and say, "my sik" ('musique' = music).

He said, "juk juk " (look) many times this evening.

When he wanted more juice, he said, "more, more, ʃɛ ʃɛ " ('ʍɛ' = more).

He picked up my shoe and said, "shoe."

He put up a real fuss at bed time, wanting to stay with mother and dad in the living room.

2 years, 28 days. February 17

Day Care Accounts

When A. came into the play-room this morning, he picked up the ball, said, "play ball," and threw me the ball.

He said, "Hi, Mary." and gave her a kiss on the head.

She then pulled his hair, and he said, "ow, ow," then "no, no."

A. kept taking his left shoe off. I made him sit down and try to put his shoe back on. He kept trying; and when he finally succeeded in getting it back on, he said, "shoe on."

I was playing short nursery rhyme records, and when they would end, A. would clap his hands and say, "more."

A. certainly likes to tease. He likes to grab other infants' toys or blankets and run away. When I make him give it back, he sits on the floor, puts his head down and pouts. He does not, however, stay that way for long. Before you know it, he is up and ready to do it again.

2 years, 29 days. February 18

Mother's Accounts

A. was cranky when he awoke this morning. He did not even greet his animals.

I brought an ill little boy home from day care. He ate little for supper, and said little, except for, " 6y6a " ([a] sore.).

Every time I asked him where the pain was, he would place his hand on top of his head, on the back of his head, and on his upper right jaw. He acquired a high fever shortly after supper. I rubbed him with alcohol, gave him an aspirin, read him stories, and rocked him well into the night.

2 years, 29 days. February 18

Day Care Accounts

When the infants line up to enter the snack room, we play various games. A. repeats, "up," when he puts his arms up, "out," when he holds his arms out, and "down," when he puts his arms down.

When A. awoke from his nap this afternoon, he was not feeling well and running a slight temperature. He was held most of the afternoon.

2 years, 30 days. February 19

Mother's Accounts

A. awoke feeling slightly better, with no fever. As the day went on, however, he became increasingly more cranky.

He referred to his pains as "my 6y6a " (sore) several times today.

(This is the first itme he has coupled "my" with " 6y6a .")

He wanted to be held a greater part of the day.

He referred to his toy dog as "my 'pesit" ('песик' = doggie).

He said, "move," a few times when he wanted me to step aside.

He referred to both mother and father with: "papa" (daddy); "maman" (mamma); and "'dēdi."

2 years, 1 month. February 20

Mother's Accounts

A. preceded several more words with, "my," today.

Wanting an apple several times today, A. said, "pomme" (apple).

He answered a question of mine with what I believe I heard to be, "no way."

A. again confused the words "'dēdi," "maman" (mamma), and "papa" (daddy), with reference to mother as well as father, as he did yesterday.

Father's Accounts

A. pointed at the empty soda bottles in the storage room and said, "содa" (soda), then "'fini 'dā" ('fini soda' = no more soda).

When searching for a lost object, A. will move the obstacle, retrieve what he has lost, and then replace the obstacle to its original spot.

A. brought me his coat, scarf, and mitts, saying, "my bye, bye-bye."

25 months, 1 day. February 21

Mother's Accounts

A. pointed at the lamb on his bib and said, "my 'pɛsɪt" ('песик' = doggie).

As father was leaving this morning, A. said, "bye-bye, maman." (mamma).

I corrected him with, "папа" (papa), he then said, "'dɛdi."

A. and father were in the kitchen; A. pointed at the sink faucet and said, "jɔ:" (l'eau' = water).

A. carried on a lengthy monologue after supper, nothing of which was comprehensible.

When grandma called, I handed A. the phone. He immediately reacted to her voice, saying, "hi, hi."

He carried forth a stream of expressive jargon. He then proceeded to repeat the words spoken by mother and dad: "Hi, бабця." (grandma); "ɔ'vwʌ" ('au revoir' = goodbye); "'ba:ɾɪtʃ" and "'manɪtʃ" ('добраніч' = good night); "Hi, дідусь." (grandpa); "bye-bye."

A. alternated between "ɔ'vwʌ" ('au revoir' = goodbye) and "bye-bye" as he rode off on his horse down the hallway, (He appeared to be practicing "ɔ'vwʌ" and "bye-bye" : saying these words very quickly, then slowly; then loudly, then quietly. A. has become fond of "ɔ'vwʌ," and seems most pleased to be able to use it whenever he can.)

A. pointed at the Mickey Mouse decal on his high chair and said, "my 'pɛsɪt " ('песик' = doggie).

Upon completing his evening meal, he said, "my pomme" (apple), wishing an apple for dessert.

He injured himself while playing, and said, "my буба" (sore).

I have not heard him precede 'byba' with 'un' for several days now. He has been saying either "byba" or "my byba.")

A. threw a stuffed animal onto the floor out of his toy box, and said what I thought was, "don't do dæt" (that).

He ran into the living room, pointed at the stereo, and jabbered a bit, ending with, "my sik" ('musique' = music).

He would not repeat any words after mother or father, only kept saying, "my sik" ('musique' = music).

A. gave me a kiss good night, and said, "kɪtʃ" (kiss); he then kissed me three more times in rapid succession, saying, "kɪtʃ" (kiss) before each kiss.

A. looked out the window, pointed at a parked car and said, "auto" (car).

In asking for assistance today, he again called, "'dɛdi."

25 months, 1 day. February 21

Day Care Accounts

A. was very quiet today. He did not play much with the other children; he was content to just sit back and watch them.

25 months, 2 days. February 22

Mother's Accounts

While playing alone with his toys, I distinctly heard A. say, "no way" and "don't do dæt" (that).

He handed me his socks this morning and said, "my ʃɔ'sɛts" ('chaussettes' = socks).

(A. appears to be transferring English plural to French.)

A. came down with a sore throat and bad cough at day care in the afternoon, so I picked him up early and took him to the doctor. We no sooner walked into the waiting room, and upon seeing the two secretaries dressed in white, A. began to shriek. He clung to me desperately and shrieked the entire ten minutes we waited in the waiting room. I tried to calm him, but he would not settle down. When I tried to put him down on the floor, he retaliated physically.

When we entered the examination room, he refused to be seated on the examining table, still shrieking at the top of his lungs. Holding him, I walked around the room and began pointing to various medical supplies and apparatuses, explaining their uses. He began to settle down, and eventually listened attentively, visually scanning the room. I handed him a doll, which he examined carefully and then began to play with. I proceeded to place him on the table and began to undress him; he, all the while engrossed in the doll. When the doctor walked in, A. suddenly leaped into my arms, clinging to my neck.

He was still, said nothing, and stared very seriously at the doctor. When she began to speak to A., he cooperated in sitting back down on the table again. He sat very still throughout the entire examination, watching her every move most intensely. He had swollen glands, especially the right one, and a sore throat. He had, indeed, complained " ɔyɔa " (sore), designating the area of the right gland, for the past several days.

We entered the laboratory for a blood test, A. with doll in hand.

He sat calmly and said nothing.

At approximately four months of age A. underwent surgery, and at approximately one year of age A. spent one week in the hospital.

25 months, 2 days. February 22

Day Care Accounts

A. climbed into the little red wagon, tipped over backwards, and said, "oops," and began to jabber away. He then got up and ran off.

As I was writing, A. came over to me and began to jabber away. I was not paying much attention to him, so he grabbed my arm and said, "Dorothy." He then laughed and walked away.

When I gave A. a cracker, he said, "please" and then, "'hæŋkju " (thank you).

25 months, 3 days. February 23

Mother's Accounts

A. and I stayed home together today.

He preceded most of his words with "my" today.

He was given a step stool and shown how to wash up and brush his teeth without assistance. He accepted the independence and spent a considerable period of time at the sink. Under my supervision, he brushed and rebrushed his front and back teeth, and spit out the dribbles of toothpaste left in his mouth before rinsing; he does like the taste of toothpaste. He even gave mommy's front teeth a few strokes. He washed his hands and face, dried himself with his towel, stepped down from the stool, and showed me he was finished.

A. was eating lunch and I was washing the dishes; He began to count in English: "two, three, four, five (sɪk), seven; then, "three, four, sɪk (six) seven;" and, sɪk (six,) seven, three, four."

He said, "no way" and "don't do dæt " (that), several times again today. He asked for "my kɔ " ('молочно' = milk), a few times. (He has never before attempted to say 'milk' in Ukrainian.)

He asked for "my sɪk " ('musique' = music). I said, " музика " (music), and asked, " Ти хочеш музику?" (Do you want music?). He answered, "my si'ka!" ('музика' = music.)

Later in the day he asked for "my si'ka! " ('музика' = music).

He said, "my shoe;" with reference to his shoe, several times.

When I walked into the bedroom to get A. after his nap, he was standing in his crib, pointing at his shoes on the floor, and requesting, "my shoes on."

He referred to his ball as "my balle" (ball).

He was taking a bath and asked for the cup on the sink by pointing and saying, " 'aku " ('чашку' = cup).

(This was A.'s first attempt to say this Ukrainian word on his own initiative.)

25 months, 4 days. February 24

Father's Accounts

A. and I were home together today.

He frequently spoke the following words today:

"move"; "no way"; and "don't do dæt " (that).

He finished his meal and said, "my fini" (finished).

He referred to his ball as "my balle" (ball).

He said, "my быба" (sore).

He said, "'dɛdi 'dɛdi," when he appeared to be asking for help. But when I would arrive at the scene, he would continue to say "'dɛdi 'dɛdi."

He said, "my sik" ('musique' = music), with reference to music.

He said, "my кџ" ('молочко' = milk), wanting milk.

He is improving his skills at catching a ball, and when he succeeds, always looks very pleased with himself.

He does not actively try to catch it, but, rather, waits with his hands cupped and extended, hoping it will drop in.

25 months, 5 days. February 25

Father's Accounts

A. and I stayed home together today.

A. pointed at his doll and identified it as "jəjə" ('ляля' = doll).

He identified his shoes, "souliers" (shoes).

He was seated to let me put on his slippers, and said, "assis" (sit down).

He said, "'mɛnɛ 'dɛdi," when he wanted to use my mechanical pencil; (the meaning of "'mɛnɛ" is unknown to us).

He said, "'pʊptʃɛ" ('пупчик' = navel), designating his navel.

He said, "my быба" (sore), several times today.

He preceded several words with "'mɛnɛ" today.

He said, "my jɛ" ('l'ait' = milk), for the first time on his own initiative.

25 months, 6 days. February 26

Mother's Accounts

With every bump today, A. would run to father and mother, and say, "my буба" (sore).

A. was with father in the bedroom, and indentified his slipper, "tuf" ('pantoufle' = slipper).

A.'s streams of expressive jargon are lengthening. He is also repeating our words more and with greater accuracy.

I told A. to turn a construction block in order to fit it together with the other blocks; he moved away saying, "no way."

This morning when he wanted more juice, he said, "more сiк" (juice).

I asked, "Ти хочеш більше соку?" (Do you want some more juice?); he answered, "'мене."

Later in the day, when I asked, "ще?" (more?), he answered, "їє" ('ще' = more).

Today A. alternated between preceding words with "my" and "'мені":

"'мені papa" (daddy); "'мені папа" (daddy); "'мені 'ресит" ('песик' = doggie); "my фе" (fe); "my balle" (ball); "my кэ" ('молочно' = milk). (The meaning of "'мені" is unknown; it appears to be a substitution for "'мене'.)

A. correctly pronounced "pantoufle," when taking a pair of slippers to father, wanting father to put them on.

A. said, "maɪ'sik" to father, and "maɪ'sikal" to mother, with reference to music.

He was spinning a pail in the bathtub and kept saying, "wi" (whee) and, "kutɕjə" ('крутится' = spinning).

He said, "'jakuju" ('дякую' = thank you), after I handed him a toy.

25 months, 7 days. February 27

Mother's Accounts

A. repeatedly called to me, "'dɛdi 'dɛdi," wanting to be held as I prepared breakfast.

A. was eating his breakfast, heard father walking around in the bedroom directly above, and began waving at the ceiling, saying, "hi, papa" (daddy). While eating he also said several times, "'mɛni 'dɛdi." He pointed out the window and said, "'mɛni 'pɛsɪt" ('песик' = doggie). He carried on a lengthy stream of expressive jargon at breakfast. He preceded several words with "' nʊpɪ." (The meaning of this word is unknown.)

He pointed at his slippers and said, "my uf" ('pantoufle' = slipper). He saw children playing outside, pointed, and said, "'u:tʃi" ('діточки' = children). After the children left, he continued to wave, saying, "hi, 'dɛdi" several times.

He wanted some milk and said, "my kɔ" ('молочно' = milk).

He was looking at his animal book, and when he saw a picture of a cow, said, "moo" and "my moo."

He heard a car start up outside and said, "bye, maman, bye, maman" (mamma).

The wash machine was on the spin cycle, and pointing to the machine, A. said, "ma 'utɪsʃə" ("ма " = unknown) ("'utɪsʃə " = 'крутиться' = turning); then "my 'utɪsʃə" ('крутиться' = turning).

A. went downstairs, picked up a ball, handed it to father, and said, "mɛni balle" (ball), a request to have father throw him the ball.

A. finished eating a sandwich and said, "ɔ:gɔn" (all gone), then, "my gone."

He wanted some music played and said to me, "maɪ'sik."

He bumped his head and said to father, "my буба" (sore).

Father gave A. a slice of cheese; A. said, "kju" ('дякую' = thank you).

Father gave A. another slice and asked him, "Qu'est-ce qu'on dit?"

(What do you say?). Without hesitation A. answered, "merci" (thank you).

In the kitchen, I was at the sink, A. and father were seated for supper.

Wanting some milk and pointing to his cup, A. said, "my kɔ" ('молочно' = milk). Father looked up at A., and immediately A. said, "my jɛ" ('lait' = milk).

I asked A. if he wanted to go to sleep; A. answered, "no way".

He answered, "no way," to several of father's questions today, also.

He saw a little girl walking outside and said, "hi, baby", followed by, "meni, baby."

He handed me a toy and said, "на" (here) then "'meni на" (here).

25 months, 8 days. February 28

Mother's Accounts

A. awoke and began to jabber at great speed. We did not go in to get him immediately, and this he obviously resented. His tone of voice became increasingly louder, shouting: "papa, papa" (daddy); "dɛdi, 'dɛdi"; "'meni 'dɛdi"; and lastly, "u:i:" (Louis).

As I was leaving and bent over to kiss A. goodbye, he pointed at my coat button and said, "ʊzɪk" ('гудзик' = button).

He said, "my kɔ" ('молочно' = milk), for more milk to both of us this morning.

Upon leaving I said, "bye Андрі́йцю" (Andrew);

A. repeated, "bye 'isju" ('Андрі́йцю' = Andrew), then said, "bye, папа" (daddy), then, "bye, 'dɛdi."

Father corrected him by saying, "bye maman" (mamma), and A. repeated.

Father's Accounts

A. heard the engine start up and said, "ɔ'fwa" ('au revoir' = goodbye).

He saw the monkey on his music box and said, "my mɔf" ('мавпа' = monkey).

He would not repeat any French with reference to his music box.

He asked for a kleenex by gesture only, wiped his nose, and put the used tissue into the garbage.

Almost every time he handed me a toy, he said, "дай" (give).

Only once he correctly said, "на, на" (here, here).

He pointed at the car and said, "auto" (car).

He pointed at the helicopter and said, "kɔp'tɛr" ('hélicoptère' = helicopter).

He said, "no way" and "juk" (look) several times.

He stacked up ten small blocks. the highest he has ever stacked successfully.

He kept alternating between preceded words with "my" and "'meni "

A. referred to me as "'dɛdi" most every time. He also called every passerby he saw, "'dɛdi."

Mother's Accounts

A. handed me a doll and said, "here, ɣa" (here).

Then he handed father the doll and said, "here, pu" ('poupée' = doll).

But when father said, "poupée" (doll), A. repeated and pointed to his navel; ('пупчик' is the word for navel in Ukrainian).

A. referred to me as " 'dɛdi " several times this evening.

A. pointed at the monkey on his music box and said, "'mɛni 'mɔfa" ('мавпа' = monkey).

I told A. to say " добраніч папа " (good night daddy), and A. repeated. Only after father said, "bonne nuit" (good night), did A. say, "bonne nuit, papa" (good night, daddy).

25 months, 9 days. March 1

Mother's Accounts

A. woke up and began calling, "'dɛdi, 'dɛdi."

I heard him saying: "jaja, jaja" ('ляля' = doll), and when I walked into his room he was pointing to his doll.

I layed him down to change him, he put his hands on his rubber pants, and said, "wet, wet."

We were walking out of the bedroom, he pointed at his shoes and said, "my souliers" (shoes). Then he pointed at his wet diaper and said, "my фє " (fe).

A. heard his father in the washroom and ran in to greet him, saying, "hi, maman (mamma). Father corrected him with, "papa." A. said, "hi pappā" (daddy).

A. pointed at the wash machine, which was not turned on, and said, "'kutɪsʲə" ('крутиться' = turning).

As he watched me preparing his porridge, he said, for the first time,

"каша" (porridge). When he finished his porridge, I gave him a bowl of Cheerios, which he called, "'i:ʊ:" (Cheerios); (I say the English word 'Cheerios'.)

He said: "maɪ'ikɔ" ('молочно' = milk); then, "'mɛnɪkɔ"; then, "maɪkɔ ." He pointed at the clock and said, "тiк-тaк " (tick-tock), "my тiк-тaк " (tick-tock).

He said, "my пaп" ('банан' = banana), then, "'mɛnɪ пaп" ('банан' = banana).

He pointed to the doll on the table, saying, "jaʃə" ('ляля' = doll).

He pointed to the phone and said, "my fɔn" ('телефон' = telephone).

After I combed A.'s hair, he patted himself on the head and said, "cute."

While A. was playing alone in the hallway, we heard him say, "my shoe," then " my chausettes" (socks).

Father was on his way out to start the car, and A. said, "bye, maman - bye, maman" (mamma). I told him, "пaпa" (daddy); he said nothing.

He is thoroughly enjoying washing-up by himself. While washing he discovered the light switch on the wall. He began to play with the switch, flicking it on and off, clapping his hands every time. He also discovered the adjacent fan switch. When he flicked that switch, he looked up toward the vent from where the sound was coming, and said, "'kutɪsʃə" ('крутится' = turning).

A. returned to day care after being away for six days. We walked into the center and A. ran directly into the play-room.

On his own initiative, A. said, " добраніч , pаpа" (good night, daddy), to father at bedtime.

(A. was repeating more Ukrainian and French this past week. It would appear that A.'s stay at home with mother and father for six days reinforced his Ukrainian and French vocabulary. Having spent more time alone with father would account for his having repeated more Ukrainian and French. English, too, however, is reinforced by the English spoken between mother and father. A. repeated more English words he heard spoken between mother and father this past week: "nose"; "what"; "nice"; "here"; "there"; "hair.")

25 months, 9 days. March 1

Day Care Accounts

A. was really happy to be back with the other children today. He played well; he did not tease anyone. He did not sleep very long after lunch, as if he did not want to sleep away the time here today. A. came over to me, grabbed a hold of his coveralls, and said, "my pants."

25 months, 10 days. March 2

Mother's Accounts

In my presence A. said, "fini" (finished), when he finished eating his porridge. He then pointed at the cupboard where the cereal is kept and said, "ou:" (Cheerios). He only preceded the word "chausettes" (socks) with the word "'meni" this morning, while I was putting his socks on. Other words he preceded with "'napi" (meaning unknown): "'napi 'dedi," when I went in to get him out of bed; "'napi fini" (finished) and "'napi da ," after having eaten

his Cheerios.

In the evening, A. was not only preceding words with either "'meni" or "'napi," but also "'nupi " (meaning unknown).

Wanting a cookie, he said, "kɔrʒɪt" ('коржик' = cookie).

We visited A.'s aunt and uncle this evening. A. complied to all requests made in Ukrainian (mother's and aunt's), in French (father's), and in English (uncle's). When A. finished drinking his juice, he said to father, "fini'da" ('fini' = finished). A. carried on lengthy streams of expressive jargon. He wanted his medicine, pointed at the fridge where it was kept, and said, "med'sɪnu" ('медицину' = medicine).

A. entertained us by pointing at his navel, saying, "'pupa" ('пупчик' = navel) and "'pupɛ" ('пупчик' = navel).

25 months, 10 days. March 2

Day Care Accounts

When A. came in , he stopped, looked around, smiled, and said, "hi." We have two new boys at daycare. A. repeated after me, "Neal" and "Georgie."

I played records. A. really enjoys music. He danced around and sang.

A.'s shoe came off. He brought it to me and said, "my shoe off."

I put it on, and he said, "'hæpɤju " (thank you).

25 months, 11 days. March 3

Mother's Accounts

A. repeatedly referred to father as "maman" (mamma) this morning, with one exception: when he heard father washing up, he said, "'нурі, мий-мий, папа" (Ukrainian 'мий-мий' = wash-up).

Alone with father, A. pointed to the spinning wash machine and said, "'kutɪsja" ('крутиться' = turning).

As father and A. were leaving this morning, A. repeated after father, "ɔ'fwa" ('au revoir' = goodbye); then immediately afterwards said, "ɔ'fwa, maman, bye-bye" ('au revoir' = goodbye, maman = mamma).

A. is now often repeating after me, "'kikɔ" ('Андрійко' = Andrew).

When A. and I play our 'name game' together, pointing to oneself and saying one's name, A. appears confused. He recurrently points to his chest and says, "мама" (mamma), after he sees me point to myself and hears me say, "мама" (mamma). (It would appear that A. understands the meaning of the word "мама" as being applicable to more than one person. This is in no way helped by the fact that the parents designate each other as such in their respective languages, and further, refer to themselves in the third person singular.)

25 months, 11 days. March 3

Day Care Accounts

I read the story 'The Three Little Pigs' to the children today. A. kept pointing to the pictures of the pigs, saying, "pig, pig."

A. enjoys looking at picture books.

25 months, 12 days. March 4

Mother's Accounts

Today, A. preceded most words with "'meni" or "'nupi" or "'napi"; and only preceded a few words with "my."

He carried on with streams of expressive jargon today.

He was sitting in his high chair playing with his food instead of eating it. I told him to eat his food; he looked up at me and said, "eat, eat" (spoken for the first time in my presence).

He finished his supper and said to me, "my fini" (finished).

In my presence he kept referring to the music being played as "ma^uIsik" ('musique' = music).

While in father's arms, A. repeated, "bonne nuit, maman" (good night, mamma).

25 months, 12 days. March 4

Day Care Accounts

I placed the wooden blocks in a circle, and got all the infants to follow me around in a circle. I would say, "Come on, let's go." A. would repeat after me, "Let's go, let's go."

We sit all the infants at the table for lunch. A. eats well. We help him eat his soup most of the time, except when he wants to show his independence. He is usually the first one finished with his soup, ready for a sandwich and milk.

25 months, 13 days. March 5

Mother's Accounts

A. said, "'jaso" ('мясо' = meat), wanting another piece of meat at lunchtime; ("'jaso" spoken for the first time).

He likes the taste of his medicine and is always most anxious to take it.

He ran to the fridge several times today, asking for "med'sinu" ('медицину' = medicine).

Alone with me, A. referred to music as "'maɪsik" ('musique' = music), and to his ball as "my balle" (ball).

He said, "fini" (finished), when he finished food and beverages today.

He said, "'i:sou" for Cheerios.

His use of the word "на" (here) was correct today.

He said, "'jakju" ('дякую' = thank you), many times to both mother and father.

A. wanted juice and said, "ciɪk" (juice).

He wanted milk, and said, "'maɪko" ('молочко' = milk).

A. preceded words mostly with "'nupi" or "'napi" as opposed to "my" and "'meni."

I heard something new today: he jabbered several utterances beginning with "'nupi" or "'napi" and ending with "a:j" (may mean 'I').

25 months, 14 days. March 6

Mother's Accounts

A. said, "'jaso" ('мясо' = meat), wanting some meat.

He said, "med'sinu" ('медицину' = medicine), wanting his medicine.

Again, he said, "'i:sou:" for Cheerios.

In my presence he spoke the following on his own initiative: "fini" (finished); "my balle" (ball); "maʒsik" ('musique' = music); "chausettes" (socks). He did not say the Ukrainian equivalents spontaneously, but did repeat them after me.

He said both "souliers" (shoes) and "shoe" referring to his shoe and shoes. He does not actively use the Ukrainian words for shoe and shoes, but does attempt to repeat the words after me; his pronunciation is however, unintelligible.

He preceded words with "'nupi" or "'napı." He ended most of his jabbered utterances with "a:j" again today.

He said, "ikɔ" ('світло' = light), as he pointed to the two lights which were on in the kitchen.

He also pointed at the flowers on the kitchen table and said, "ɔki" and "ɔtʃi" ('квіточки' = flowers).

The wash machine was spinning, and he said, "ta 'kutɪsʲə" ('крутиться' = turning); ("ta" could have been an attempt to say "машина" (machine)).

A. took me by the hand, and began to point to object after object, naming each in Ukrainian. It appears to me that he pointed and named only those objects which he always refers to only in Ukrainian: "'ikɔ" ('світло' = light); "jaʲa" ('ляля' = doll); "kasha" (porridge).

His shoes on the floor, which were clearly visible, and which he either refers to as "shoe" or "souliers" (shoes), he did not name. The ball on the floor, which he always refers to in French, he did not name.

A. said, "my 'pɛstɪ" ('песик' = doggie), with reference to his dog and all other animals.

A. enjoys crawling into the cabinet where the pots and pans are kept.

Today, he closed himself inside the dark cabinet and began to play peek-a-boo with me, opening and closing the door, saying, "boo."

He said, " 'оџік" ('коржик' = cookie) many times today, pleading for a cookie.

A. was riding his horse up and down the long hallway as he often does.

Today, however, he deliberately placed a toy on the floor in front of his horse, so he could push it. While riding he accidentally drove

over a piece of paper. He apparently took a liking to the sound of the paper underneath the wheels, because he backed up and drove over

it again and again. When a section of the paper got caught in the spokes, he also appeared amused, because he continued to ride the

horse up and down the hall, most engrossed in the crinkling sound of

the paper. After approximately fifteen minutes of riding, he suddenly jumped off his horse, hurriedly grabbed two toys, and used one toy to

push the other down the hall. This he carried on with for almost a

half hour. Very excitedly, he came to get me several times within that hour, to show me what he was doing. It would appear that he wanted to

share what may have been new discoveries.

He awoke from his nap with a slight temperature, complaining, "буба"

(sore), holding his hand on his head. I held him, read stories, showed

him pictures; he was most quiet and only occasionally repeated animal names after me.

25 months, 15 days. March 7

Mother's Accounts

A. awoke in a miserable mood this morning. He did not say much until after breakfast, when, like yesterday, he pointed at various objects, naming them in Ukrainian. I am certain his choices were deliberate; pointing only to those objects he always names only in Ukrainian in my presence.

A. was washing up. He could not reach his toothbrush, and said, for the first time, "'iku" (' щітку ' = brush).

A. was holding a toy dog, and said to me, "nounours" (teddy bear). He frequently repeats this word after father with reference to bears, but has never before spoken the word on his own initiative in our presence. On his own initiative, A. said good night to me in French; father was present.

25 months, 15 days. March 7

Day Care Accounts

A. was not feeling very well today. The least little push from one of the other children, and he came crying to me. That is not like A.; he always stands on his two feet and fights back.

He can now say, "Maureen."

Shantel asked A. if he wanted a candy, and A. replied, "aɪ 'wanə 'kæni "
(I want a candy.).

25 months, 16 days. March 8

Mother's Accounts

A. called to father, "maman" (mamma), several times today.

We were taking A. to the doctor this afternoon: as soon as we passed the drug store, which is a few doors away from the doctor's office, A. stopped, looked down the familiar mall, and began to shriek, jumping up into father's arms. He physically protested to being lead into the waiting room. When he saw the white uniforms, he cried and shrieked even more loudly. I handed him a can of juice and two straws, which he gladly accepted; he calmed down enough to sit on father's lap.

We waited for the doctor three-quarters of an hour: at first A. sat quietly, sipping his juice, but eventually got up to walk and run around the room. He pointed at various objects and pictures, wanting to know the names of each. He was told the names in both French and Ukrainian.

There was a little girl in the room approximately the same age as A., to whom A. kept saying, "hi, baby," and with whom he eventually played. When we were called into the examining room, A. began to protest again, crying and wanting to be held by father. A. calmed down several minutes after being seated in the examining room. He stayed calm during our conversation with the doctor. However, when the doctor set forth to examine A., approaching him with a long swab, A. began to cry again. He was apparently frightened at having the swab put into his mouth to the back of his throat, as had been executed at the previous visit. He cried throughout the entire duration of the examination, clinging to father's neck.

25 months, 16 days. March 8

Day Care Accounts

I asked the children to put their hands up if they wanted to play records. A. raised both hands in the air and replied, "please, 'ɛkərd " (record). A's shoe came off; he brought his shoe to me and said, "Oh, my shoe off." I put it on and he said, "hæŋks " (thanks). A. was playing on the floor with a toy car. Allen went over and stood in front of him; A. looked up and said, "Move back."

25 months, 17 days. March 9

Mother's Accounts

A. continued to precede words with "'nuɟi" or "'naɟi." He ended jabbered phrases with "a:j " (appears to mean 'I').

When I arrived at day care to get A., I was given the photos that had been taken of him a month ago. A. looked at the photos, pointed and said, "a:j " (I). I told him, "Так, це Андрійко ." (Yes, this is Andrew.); to which he replied, "'kikɔ, I" (' Андрійко ' = Andrew). At home I framed one of the new photos and placed it on the bookcase among several other photos. I pointed to every photograph and named all persons for A. This I do frequently. He appeared to be interested mostly in his new photo and in the one other photo of himself. He would glance, to the right and to the left, from one photo to the other. Father came home and A. immediately began to jabber very excitedly to him, leading him by the hand to the bookcase. The word "I" was spoken often in his jabbering. He pointed at his new photo and said, "'kikɔ" (' Андрійко ' = Andrew). He did not refer to the other photos of relatives and friends.

I was out for the evening. Father took notice of the fact that A. reverted back to preceding words with "my."

25 months, 17 days. March 9

Day Care Accounts

A. was playing with plastic dishes; he brought me a spoon and said, "pu:n" (spoon), and brought me a cup and said, "cup."

He said to Hemsu, a new little girl we have here, "Go to sleep, baby."

I asked him, "Where did Farria go?" He answered by asking, "Where Farria go?" then "Farria went away."

When A.'s playing and the other children bother him, I sometimes hear him say, "to go away."

25 months, 18 days. March 10

Mother's Accounts

A. has a new toque which he insisted on wearing the entire evening, and even to bed.

He also wanted his bear at bed-time. I tucked A. in and placed his bear next to him. He did not protest against having it lie on its back. He tucked the bear in, covering it to the neck. Then a minute later, he turned towards the bear, lifted the covers, and pulled them up over the bear's nose. Then he pushed the bear even further down underneath the covers, up to its eyes; he moved over a bit deliberately creating an even greater distance between the bear and himself, and tucked the covers in at his sides. Finally content with this arrangement, he said, "'ba:ɲitʃ" ('добраніч' = good night) to me.

25 months, 18 days. March 10

Day Care Accounts

When I came in this morning, A. said, "Hi, Dorothy." He was playing with a toy car, said, "car," and showed it to me. I asked A. whose car that was, and he said, "no, my car."

A. was sitting on a plastic chair. Derrick tried to sit beside him; A. looked at him and said, "off my chair." A. got Derrick to sit in the wagon by saying, "get in."

A. stepped on Craig's fingers, looked at him and said, "I sorry"; they both began to laugh.

We were watching a T. V. commercial and I said, "Look at all the boys playing hockey." A. looked at me and said, "boy, 'aki" (hockey).

25 months, 19 days. March 11

Mother's Accounts

A. has not preceded words with 'hɒŋi ' or 'həŋi ' these past few days, but has preceded words with "my."

There is now an interspersions of the word "I" in A.'s lengthy streams of expressive jargon.

Father's Accounts

Father and A. were together in the kitchen at supper time. For over a month now, in father's presence only, A. has referred to his apple juice as either "jus" (juice) or "pomme" (apple). Today, he pointed at his cup and said, "jus de pomme" (apple juice) and "jus pomme." He asked for milk, "jɛ" ('lait' = milk). He finished his supper and said, "fini" (finished).

Mother's Accounts

After supper I took A. upstairs to be changed. He protested with, "no" and "no." When I explained to him that we were going to visit Kathy and Cliff, he immediately settled down.

A. was happily greeted at our friends, and he made himself right at home. Kathy and I spoke to A. only in Ukrainian, father and a French speaking girl spoke to A. only in French, and the other six people spoke to A. in English. A. carried out various requests given him in all three languages. With the English speakers, A. only spoke English, with father, Kathy and myself, he mixed all three languages, French with father, and mostly Ukrainian with Kathy and I; and with the French speaking girl, he spoke only French. He pointed at various objects and named them for her. When she asked where papa was, he pointed at father and said, "papa" (daddy). When she asked where mother was, he pointed at me and said, "maman" (mamma). There was a balloon in the house, and A. heard and repeated the word for balloon in all three languages several times. On his own initiative, however, he only spoke the French "ballon" (balloon); and this word was directed at each individual throughout the evening. A. frequently showed off his toque, pointing to it and saying, "cute." A. always went to Cliff to have his cup filled with more juice, with only the words, "more, more."

25 months, 19 days, March 11

Day Care Accounts

When I came in this morning, A. ran to me and wanted up. I held him for a while, then he wanted down. It seemed as though he just could not get

along with the other children today. He would hit them or take the toys they were playing with, and run. When I made him give the toys back, he would sit down, hang his head and sulk.

A. discovered how to open the doors in the room. He caught Derrick's fingers in the door. When I scolded him, he sat on the floor and cried; but then went right back to the door again.

One of the children brought a toy monkey. A. calls it "'aŋki" (monkey). He also said, "I want 'aŋki" (monkey).

25 months, 20 days. March 12

Mother's Accounts

A. spoke more English to me today than usual. He said, "more," quite frequently.

Showing off his toque again today, he said "cute," "oh, cute," and "oh, pretty." (He heard "pretty" and "oh, pretty" spoken often yesterday evening, with reference to his toque.)

He said, "hey," when pointing to various objects. The three of us were eating lunch; A. pointed at the fruit basket and said, "'uko" and "'iko" ('яблучко' = apple).

A. played outdoors with father. When it was time to come in, A. protested. I allowed him to return outdoors and play in front of the house. This is the first time A. was allowed to play outdoors without our supervision. He sat on his tricycle, watching the children in the field across the way. Several minutes passed, and a few children approached A. A. immediately began to jabber away to them. Then they all disappeared around the corner. I went out and peeked around the corner, saw that he was playing, and went back indoors. Every few minutes A. would run home,

open the door, glance about, jabber away at us, and then run back to the children. He carried on like this for about a half hour. When I discovered A. was soaked to his knees from the puddles he had been playing in, I brought him home. A. raved in protest upon being changed and taken to bed for a nap.

He only preceded words with "my" today.

While playing alone, playing with mother, playing with father, and playing with mother and father, A. referred to himself as "I."

On his way up the stairs for a bath this evening, he said to me, for the first time, "'kut̩si 'kut̩si" ('купці-купці' = bath).

While together with mother and father, a. said, "maɪ'sik" ('musique' = music).

Father was taking A. to bed; on his own initiative A. said good night to me in French.

25 months, 21 days. March 13

Mother's Accounts

We visited friends this afternoon (an English speaking couple). A. spent some time watching a hockey game on T.V.; he kept pointing to the puck, calling it, "balle" (ball). He also saw a balloon on T.V., pointed and said, "ballon" (balloon).

He frequently walked over to the stereo, asking for "maɪ'sik" (musique = music) to be played.

A. saw a photograph of himself, pointed to it, and said, "baby." I told him it was "Андрійко" (Andrew), and he repeated, "'kikɔ" ('Андрійко = Andrew). Everytime A. wanted his cup filled with more juice, he asked our friends for "more"; and each time he had his cup refilled, he came

to me and said, "сік" (juice).

He repeatedly pointed to various objects saying, "за" (that); his actions and words were directed at both father and mother. He kept running to the window to point to our parked car, saying, "auto" (car). He would point to and touch the buttons on my blouse, his shirt, and our friend's blouse, saying, "ґудзик" (button).

At home A. was watching me stir the soup on the stove, and said, "hot." I told him, "Так, то гаряче." (Yes, that is hot.); he repeated, "'батґе" ('гаряче' = hot).

A. lined up and proceeded to push the convoy up and down the hallway; he said nothing.

A. was looking at a post card, pointed to the picture of a horse, and said, "moo, moo." I talked about the fact that it was a horse. He listened, but said nothing.

Father was taking A. to bed; on his own initiative A. said good night to me in French.

25 months, 22 days. March 14

Mother's Accounts

I took A. out of bed; he pointed at his chair and said, "'маґіт."

I could not figure out what he was referring to until I spotted the ball nestled in the chair ('мячик' = ball); (this was his first attempt to say this Ukrainian word). I was changing him; he put his hand on his bottom and said, "ґе" ('derriere' = bottom). I said, "Так, дупця ." (Yes, bottom). He laughed, but said nothing more. (A. began to say "ґе" two weeks ago to father. This was the first time he said this word to me.)

A. finished his supper and said, "ɔ:'gɔn" (all gone); then immediately afterwards, for the first time in our presence, he said, "no more."

Father's Accounts

A. was holding his construction cubes and I asked him, "Qu'est-ce que c'est?" (What is that?). He answered, "my ku" ('cubes' = cubes).

He pointed to his toy horse, and said, "'kɔnɐt" ('коник' = horse).

(A. has never attempted to say this Ukrainian word. It presented itself for the first time, interestingly, in father's presence.)

A. pointed to his slippers, and said, "tuf" ('pantoufles' = slippers).

I asked A to quiet down; he pointed at mother sleeping on the couch, and said, for the first time, "dodo" (sleep).

While being changed, A. tapped his bottom, and said, "jɛ" ('derriere = bottom).

A. drank his cup of milk, ran into the kitchen and dropped the cup into the sink.

He went into the bathroom, pulled his footstool out from under the sink, climbed up onto it, and was prepared to brush his teeth again, for the second time in an hour. He repeated after me, "brosse" ('brosse à dents' = toothbrush) and "pâte" (paste). When I pulled the plug in the sink and the water disappeared, he said, "partie jɔ:" ('partie l'eau' = the water is gone); ("partie" spoken for the first time). Then he placed his toothbrush back into the cup, got off his stool, and pushed it back under the sink.

When being changed he repeatedly said, "'guzɐt" ('гудзик' = button), designating the buttons on his clothes.

I moved A.'s toy horse while he was standing on the stairs: he stepped

down, pulled the horse back to its original place, and said, " тут 'кѡнѣт " ('тут коник'= here horsie). (A. has never attempted to say the Ukrainian word " тут " It presented itself for the first time, interestingly, in father's presence.)

Wanting his toque, he said, "ку" ('шапочку'= hat). (A. has never attempted to say this Ukrainian word. It presented itself for the first time, interestingly, in father's presence.)

25 Months, 22 days. March 14

Day Care Accounts

A. played at taking away toys from other children today. With several of the children he succeeded, others pushed him away.

Several times A. grabbed Derrick's blanket and ran. When Derrick would cry, A. would go up to him, say, "here," and hand back the blanket.

25 months, 23 days. March 15

Mother's Accounts

A. was eating breakfast and heard father walking around upstairs: he pointed to the ceiling and said, "maman" (mamma); I told him it was "папа" (daddy); A. then said, "папа, папа" (daddy).

A. heard father washing up and said, "мий-мий" (wash[ing] up).

Father and A. were alone in the kitchen: A. heard me coming down the stairs, and said, "папа" (daddy); father told A. it was "maman" (mamma); A. then said, "maman, maman" (mamma).

I was dressing A. for day care: he pointed at his toque and said, "ку" ('шапочку'= hat). (This word first presented itself yesterday, in father's presence.)

The three of us were together in the living room: A. bumped his arm against the wall, ran to father and said, "bobo" (sore); (for several weeks now, A. has referred to a sore only in Ukrainian).

A. took his toy dog to father and said, "petit chien" (little dog); he then turned to me and said, "'pɛsɪt" ('песик' = doggie).

A. pointed at the flowers on the table and said to me, "kɪ" ('квіточки' = flowers).

He walked over to the stereo and said, "maɪ'sɪk on" ('musique' = music), wanting music to be played; (this is the first time he combined the English word "on" with "maɪ'sɪk").

A. was turning the hand of the clock in his book and said, "turn."

Together we proceeded to turn the pages. A. said the following: for every child he said, "baby"; for the toothbrush he said, "'ɔku" ('щіточку' = brush); for the water in the sink he said, "eau" ('l'eau' = water); for the glasses of milk he said, "jɛ" ('lait' = milk) and "kɔ" ('молочко' = milk); for the children eating cookies he said, "am" ('гам-гам' = eat); for the ball he said, "balle" (ball). He then began to turn the pages back and forth, counting, "four, faɪ, sɛt" (five, seven).

A. bumped himself, ran to father and said, "буба" (sore). A. preceded several words with "my" today. I was bathing A.: he pointed to the soap and said, for the first time, "мило" (soap); he began to sing; then he stopped singing and began to search for something in the water; he found what he was obviously looking for - a small plastic bottle with a narrow neck; he held it up to his mouth in imitation of a microphone and resumed his song; he would put his microphone down every so often, clap his hands, and say, "jɛ:, ɛɛ", after which he would again resume

his song with microphone in hand. (With great enthusiasm A. watches singers on T.V.; and two evenings ago he watched a young boy sing with a microphone.)

25 months, 23 days. March 15

Day Care Accounts

When I came in this morning, A. ran to me and said, "Hi, dar." (there). A. was climbing on a block and I said, "Don't fall". He repeated, "tont fou: " (don't fall).

A. loves to watch T.V. He sits and chatters away, pointing to the T.V.; but I don't understand what he is saying.

25 months, 24 days. March 16

Mother's Accounts

A. and I were coming down the stairs this morning; he pointed toward the living room and said, "turn." (I am not certain what he was referring to. The clock book was not in sight; but perhaps he did, indeed, recall our turning the clock and turning the pages of the book in the living room last night.)

He heard father running the water upstairs, and said, "папа , мий-мий" (daddy, wash[ing] up).

He wanted his breakfast and said, "кашу" (porridge?); I asked him, "Ти хочеш кашу?" (Would you like porridge?); he said nothing.

When the porridge was placed before him he said, "каша" (porridge).

A. pointed at the wall clock in the kitchen and said, "тiк-так, turn" (tick-tock). Then a few moments later, he looked up at me, and said, "my turn."

A. wanted his tiny wooden doll which was on the counter, out of reach, pointed at it and said, "jəjə" ('ляля' = doll); I was talking and handing the doll to him just as father walked into the kitchen; A. immediately turned to father, held up his doll and said, "'pepu" ('poupée = doll); father said, "Oui, c'est une poupée."; A. repeated, "poupée"; several minutes later A. again referred to the doll as "'pepu" ('poupée' = doll); father corrected him once again, and A. repeated, "poupée" (doll).

A. occasionally preceded words with "my."

A. and I were upstairs. I was getting A. ready for his bath. Father was downstairs in the living room watching a sports flash of a football game on T.V. A. heard the sportscaster and the audience cheering, walked over to the staircase, pointed down into the living room, and said, "'aki 'aki" (hockey).

I noticed that A. began to hold his cup with only one hand while drinking today.

A. appears to be ambidextrous, although there is a tendency to eat only with his left hand, drink more often with his right hand, throw balls and push toys with both hands, and kick balls with both feet.

25 months, 24 days. March 16

Day Care Accounts

One of the children brought in a toy gun today. A. got a hold of it and began shooting at Saan, saying, "pow-pow."

He tripped over Melanie's feet, said, "oh," and jumped up. He then said quite a bit more, but all I could understand was "oh."

Derrick was sleeping on the cot; A. pointed to him and said, "he's sik" (sick).

25 months, 25 days. March 17

Mother's Accounts

A. and I were alone in the kitchen; he wanted some more sugar sprinkled on top of his cereal and said, "encore 'sukr'" (more 'цукор' = sugar).

When he finished breakfast, he announced, "I am fini." ("I am" was spoken for the first time at home.)

After returning home from day care, he said, "more," every time he wanted more of something.

He wanted a banana, and said, "banane."

A. played ball with his father after the evening meal; he consistently referred to the ball as "my balle" (ball). He also insisted on taking the ball to bed.

25 months, 25 days. March 19

Day Care Accounts

The children were all looking out the window. I said, "Look at the school bus parked out on the street." A. pointed to the school bus and said, "school ^S" (bus).

A's shoe came off; he brought it to me and said, "shoe came off." I said, "O.K., I will put your shoe on." When I got his shoe on, he looked at me, smiled, and said, "my shoe on."

A. brought a ball today. Everytime he threw it, not wanting to play with it anymore, but saw one of the other children take it, he would run after it, repeating, "my ball, my ball," until he got it back.

25 months, 26 days. March 18

Mother's Accounts

With every bump A. ran to us both, saying, "буба" (sore).

He often repeated, "bobo" (sore), after father, and answered, "бубу" (sore), to my question, "Чи Андрійко має бубу?" (Does Andrew have a sore?).

A. insisted on wearing his toque in the house this evening. I decided to take a few photographs of him; when he saw me take the camera out of the cupboard, he immediately ran to get his tricycle. He sat down on it, smiled, and posed, saying, "'kikō 'kikō" ('Андрійко' = Andrew). After I took a few photos, he jumped off his tricycle, ran into the living room to his recently framed photo, pointed to it and said, "'kikō 'kikō" ('Андрійко' = Andrew).

He played peek-a-boo, pulling his hat down over his eyes, and up again, saying, "ну-ну" (cuckoo).

25 months, 26 days. March 18

Day Care Accounts

Craig brought a pull-toy-dog to day care today. A. kept going after it, saying, "mine puppy, mine puppy." Every time Craig gave it to A. to play with, however, A would not take it. (A. has not preceded words with 'mine' for several weeks.)

25 months, 27 days. March 19

Mother's Accounts

A. spent several hours playing with all his toy cars and trucks, imitating the sounds of engines, motors, and sirens.

A. wanted music played all day long: he would run to the stereo, and ask for "maɪ'sik" ('musique' = music).

Wanting to play outdoors, he brought me his sweater, ski pants, jacket, and scarf, and said, "bye-bye." I asked him, "Де твої чоботи?" (Where are your boots?); he ran to get his boots, brought them to me and said, for the first time, "my boots." Then he ran back to the hall closet, stood in front of it, pointed to the top shelf, and began to whine. I asked him to tell me what he wanted. He only whined and began to rub the fingers of his right hand together. When I spotted his gloves on the shelf and asked, "Рукавички? Ти хочеш свої рукавички?" (Your gloves? Do you want your gloves?), he began to jump up and down very excitedly, saying, "'vɪtʃkɪ 'vɪtʃkɪ" ('рукавички' = gloves).

He put three trucks on the kitchen table, sat down on a chair, and together we pushed the convoy back and forth across the table. He became very disturbed every time one of his trucks was not perfectly lined up with the others. He was ecstatic with our play; and each time we pushed the convoy faster, he roared with laughter. We played our game for a half hour. Then I went to get a cup of coffee. When I returned with my cup and placed it on the table, A. became very annoyed; he stretched out his arm, pushed the cup aside and said, "mu:'feɪ: mu:'feɪ: " (move away) and "I 'puʃŋ I 'puʃŋ" (I[am] pushing), ("I 'puʃŋ " spoken for the first time at home).

2 years, 2 months, March 20

Mother's Accounts

I was trying to get A.'s mitts on: he shouted, "pouce, pouce" (thumb), pointing to the fact that his thumb had not been slipped into the thumb of the mitt; ("pouce" spoken for the first time to me; father says that A. has been saying "pouce" on his own initiative in father's presence for several weeks.

A. approached me and asked for "maɪ'sik" ('musique' = music). As I was putting a record on, he assumed a squatting position in preparation for the Ukrainian dance steps he has learned. When the music began to play, he jumped to his feet, whined, pointed to the stereo and again said, "maɪ'sik" ('musique' = music).

I changed the record only to find that it, too, was not the one he wanted. After two more tries, I finally found the particular album he was waiting for; away he went with his dance steps. He danced to a few numbers, and then insisted on dancing with me to the remaining numbers on the album. He intermittently ran to father, took him by the hand, dragged him into the living room, and danced with him also.

The three of us payed some friends a visit (English speaking). He saw a ball, began to whine, and said, "my balle" (ball) several times, seeking my permission to play with the ball. A. always approached our friends when he wanted "more" of something.

Father was changing A.'s diaper at bedtime; A. placed his hand on his bottom and said, "бyбa, jε" (sore, 'derrière' = bottom).

26 months, 1 day. March 21

Mother's Accounts

A. continues to occasionally call me "напа" (daddy) or "papa" (daddy), and father "maman" (mamma). He smiles and often giggles after he is corrected.

He wanted his cup for the bath, pointed to it and said, "ку" ('чашку' = cup). He also wanted the cap to the shampoo bottle, pointed to it and said, "ку" ('крышку' = lid).

A. sang away at dinner, shaking his head and swinging his arms. We detected a series of repetitive utterances.

He was most active this evening; he danced, sang, and played ball.

He splashed away in the bath tub, taking dives and roaring with laughter.

He imitated many of our physical actions; plus there were traces of intonation imitation throughout his simultaneous streams of expressive jargon.

He kept climbing onto father's legs while father was sitting on the floor, and jumping off, roaring with laughter.

He took my slippers off my feet, placed them side by side on the floor, slipped his feet into them and walked around the house for a while. He has enjoyed doing this for several weeks.

A. pointed to father's cigarette and said, "atat" (hot). Father said, "Oui, c'est chaud." (Yes, this is hot.). A. repeated, "chaud." He walked over to me, pointed to my cup of coffee, and said, "atat" (hot). I said, "Так, ця кава гаряча; це гаряче." (Yes this coffee is hot; this is hot.). He repeated, "'ḥatʃɛ" (hot).

26 months, 1 day. March 21

Day Care Accounts

Several children brought various toys today. A. kept after them trying to get the toys, saying, "mine, mine." He is, eventually, most always given the toys. However, if the other children dare touch A.'s ball, even when he is not playing with it, he gets very hostile and goes after his ball until he gets it. He will have his hands full of toys, yet wants the toys the other children have. When I sit him down and scold him, he listens; and when he returns to play with the others, he behaves for a while.

26 months, 2 days. March 22

Mother's Accounts

A. sang through breakfast this morning. He played ball after breakfast. When he was dressed and ready to leave for day care, he placed his ball on the floor and said, "bye-bye balle" (ball).

We went out to the car: he put his bare hand on the car door, looked up at me and said, "fw^" ('froid' = cold); (this is the first time he has spoken this word to me; he has, however, been saying this word on his own initiative to father for several days).

26 months, 2 days. March 22

Day Care Accounts

A. was sitting on a chair, and George climbed up to sit beside him.

A. became angry and kept saying, "Give mine chair." They both slipped off onto the floor and started laughing.

26 months, 3 days. March 23

Mother's Accounts

A. asked for "sukr " ('цукор' = sugar) on his cereal this morning.

He ran into the bathroom, pulled out his step stool and excitedly said, " мий-мий " (wash).

He pulled a toothbrush out of the cup, and realizing it was not his, he put it back inside the cup. He then picked up the cup, looked inside, found his brush, and pulled it out.

He brought me his rubber pants and asked for the first time, "be'li" ('бери' = take [it]?). I replied, "бери" (take [it]); he smiled and ran off. When I called to him asking for the pants, he quickly ran back and threw them into my outstretched hands. He made a game out of this, taking down the clothes that were hung to dry, one at a time, running to me with each article, waiting for me to ask for its return, and then throwing it into my hands.

He accidentally stumbled upon his little wooden puppy and doll, which he had stown away in the cupboard last week, picked them up and placed them on the kitchen table, and said, "'pesit, jaja, poupée, jaja, poupée, ja" ('песик' = doggie, 'ляля' = doll, doll, 'ляля' doll, doll, 'ляля' = doll).

Pointing at various objects he asked both father and mother, " " ('qu'est-ce que c'est, ça?' - what's that.) (A. has not inquired as to the name of something for several months.)

A. pointed to the image on the T.V. screen and asked, "ke'sa" ('qu'est-ce que c'est, ça?' = what's that?). I translated, "що то?" (What's that?);

A. repeated, "to'to" ('що то? = what's that?),

and immediately answered his own question with, "auto" (car). He then laughed and said, "tɔ'tɔ auto" ('що то? ' = what's that?; car). (It would appear that A. was aware of the similarity among the sounds and found it quite amusing.)

He wanted his tricycle out of the storage room, pointed at the closed door, and said, "velo" (bicycle); (this word was spoken for the first time to me; he has, however, spoken this word on his own initiative to father for several days).

He saw the wash machine spinning, pointed to it, turned to father and said, "turn, turn."

He wanted to sit down and said to me, for the first time, "ti'taj" ('сідай' = sit [down]).

26 months, 3 days. March 23

Day Care Accounts

A. was his usual self today; he both fought and played well. He had a long nap and woke up in a very good mood.

26 months, 4 days. March 24

Mother's Accounts

On the way out the door this morning, A. jabbered a long sentence in which the following words were distinguishable: "...papa...auto...balle..." (daddy...car...ball...).

A. spontaneously said, "'mɛnɛt" ('ведмедик' = bear), referring to his teddy bear.

A. took a sip of his hot milk and said, "chaud" (hot). (A. has been saying "chaud" to both mother and father for several days.)

He was patting his teddy bear and said, "dou douçe" (gently). (He has been saying "dou douçe" for a week when patting his stuffed animals and stroking father and mother's face.)

26 months, 4 days. March 24

Day Care Accounts

A. was riding one of the toy trains. Michel tried to force him off so he could ride it. A. sat tight on the train and repeatedly said, "my kau, my kau" (car). I made Michel leave A. alone. A. shook his finger at him and talked a mile a minute; I could not understand a word he said. It was really cute to watch A.'s expressions.

26 months, 5 days. March 25

Mother's Accounts

While I was dressing A. at day care, he pointed at one of the girls who had a soiled dress, and said, "baby, sale" (dirty).

Today he often spoke the following words: "push"; "no way"; "up"; "don't"; "'si:u" (see you).

He referred to his teddy bear as "'menɪt" ('ведмедик' = bear).

26 months, 5 days. March 25

Day Care Accounts

A. came in the door this morning, looked at me and said, "hi, there."

He called Jimmy, "'jɪmi."

Allen had his own bottle and A. said, "Allen'batɪ" (Allen's bottle).

He picked up Allen's bottle, went over to him and said, "here 'bateɪ"

(here [is the] bottle). They looked at each other, smiled, and then went their separate ways.

26 months, 6 days. March 26

Mother's Accounts

A. wanted me to push his toy car across the room, and said, "'puʃət" (push it).

A. and I were together: A. closed one door, and another door accidentally slammed shut from the draft; he stood quietly, looking at the other door, and said, "nana , nana" (daddy). (It would appear that A. was trying to reassure himself that daddy was behind the door and the cause for it slamming shut. It is interesting that A. called out 'daddy' in Ukrainian.)

26 months, 7 days. March 27

Mother's Accounts

A. wanted the door opened, turned to me and said, "'wewi" ('двері' = door).

He said, "push" and "don't," often today.

Some friends dropped by; A. danced with them saying, "tɛs" (may mean 'dance').

A. pointed to his cup of cold milk and said to me, "froid" (cold). Then he pointed to the refrigerator and said, "froid" (cold).

Wanting me to sit down, A. pushed me toward the sofa, saying, "ti'tar ti'tar" ('сідай' = sit [down]). Once I was seated, he commenced to dance around before me.

A. appeared to be imitating many of my actions and movements today: he moved hastily from the cupboard to the sink, from the sink to the refrigerator, from the refrigerator to the cutting board; he walked up and down the hall carrying an empty cup.

He pointed to the storage room where his tricycle is kept and said to me, "velo" (bicycle). He was trying to turn his tricycle around in the hallway and said, "turn."

A. now walks up the stairs, right foot, left foot, when I hold his hand.

He now also drinks and walks simultaneously. The tendency now, more often than not, is to hold his cup with only one hand.

26 months, 8 days. March 28

Mother's Accounts

A. drank his juice and said, "ɔ:'gɔn sɪk, ɔ:'gɔn sɪk" (all gone juice).

He pointed to the kitchen chair and said to me, "ti'taɪ" ('сідай' = sit [down]). (A. was neither requesting that I sit down, nor did he himself wish to sit down. It would appear that 'ti'taɪ' in this instance meant 'a seat'.)

While eating he said to himself, "mu:'fɛɪ: my" (move away, mine).

(These words may have been triggered by a recollection of his meals with other children at day care.)

A. was deliberately dragging his guitar across the floor to make it squeak; every couple of steps he would stop, place his guitar on the floor, and put his hands on his cheeks. (He often drags his guitar to make it squeak, and observes me place my hands over my ears to shut out the screeching sound. His placing his hands on his cheeks, I believe,

was an imitation of my placing my hands over my ears.)

A. alternated between saying "hot" and "ɦatʃɛ " ('гаряче' = hot) when he saw me ironing or holding a cup of coffee.

While eating he said, "am am" ('гам-гам' = eat). Father finished taking a shower: I told A., "Папа скінчив." (Daddy finished.); A. replied, 'ɦana, 'kusi 'kusi" (daddy, 'купці' = bath); then immediately put his fingers in his hair and said, "'ɔsjə 'ɔsjə" ('волося' = hair), (perhaps in anticipation of the sound of the hair dryer which he usually hears after father's shower).

A. was sitting on my lap and eating a snack; he began to haphazardly shove a spoonful of his food into my mouth, saying, "here some," simultaneously opening his own mouth.

As to his father, from whom A. learned the word, A. also says, "ping" to me, when he hits his little bell.

A. was so reluctant to go to bed, he slapped my hands. I scolded him and slapped his hands in return. Father came upstairs and A. immediately said to him, very rapidly, "...maman, буба ...bobo..." (...mamma, sore ...sore). (One sees the evolution from totally unintelligible expressive jargon of short duration to expressive jargon of much longer duration, to expressive jargon interspersed with intelligible words to describe an experience.) I was so surprised at hearing him explain the occurrence, I said to Louis, "Did you hear that?" A. suddenly put his fingers on top of his head and said, "here."

At bedtime father asked A. if he wanted to give his bears a kiss. A. asked, "kiss, nounours?" (bears?), then kissed them and said, "kiss, nounours! " (bears!).

26 months, 8 days. March 28

Day Care Accounts

When A. bumps himself he says, "boobah, "(Ukrainian). He is also very consistent in using the same words to designate a ball and a puppy, which I am unable to transcribe. I find it difficult to watch A. and listen to his pronunciation with the other infants noisily playing around. (From what I have been told, A. apparently designates 'ball' in French, and 'puppy' in Ukrainian.)

26 months, 9 days. March 29

Mother's Accounts

I told A. we were going "bye-bye" to day care. He ran to the door saying, "ton-ton tif, ton-ton tif" ('ton-ton Cliff' = uncle Cliff). (One wonders if he bothered to listen to the words spoken after "bye-bye." He certainly jumped to the conclusion that we were going to Kathy and Cliff's.)

He had his hat on and said, "my ku" ('шапочку' = hat).

A. appears to be afraid of trucks. We were caught in heavy rush-hour traffic, and moving along slowly bumper to bumper alongside a semi. A. was seated in his car seat on the side next to the truck. He became frantic at the sight of the huge tires alongside him, and began to squirm in his seat, trying to push himself around to face the opposite direction. He did so successfully and did not turn back for even a glimpse until he heard the truck drive forward noisily. Then he returned to his original position.

We were shopping at the supermarket; A. saw a box of Cheerios on the shelf and said, "i:joʊ:" (Cherrios).

26 months, 9 days. March 29

Day Care Accounts

A. is certainly full of pep and energy. He plays continuously.

26 months, 11 days. March 31

Day Care Accounts

A. was running around and accidentally ran into the wall. He came crying to me, talking away; but I could not understand a word he was saying. He only cried for several seconds before resuming his activity of running.

We had hot dogs and jello for lunch. A. kept saying, "'wi:nor" (weiner) and "'elou" (jello).

26 months, 12 days. April 1

Day Care Accounts

A. was naughty today. I put him in the playpen; he looked at me and stuck his tongue out. I took him out of the playpen ten minutes later and he said, "be good."

26 months, 13 days. April 2

Mother's Accounts

At home today A. appeared to be imitating a recollection of others' actions: stretching, yawning.

He pointed at many of his belongings today, saying, "my." He said, "here," quite often when handing me things today. While engaged in solitary play, he said, "O.K."

Before putting A. to bed for a nap, I told him that after his sleep we would visit Kathy and Cliff. Upon awaking, two hours later, he immediately called to me, "bye-bye."

While I was upstairs getting dressed for our visit, father was telling A. that when mother was ready, we would all go to Kathy and Cliff's.

When I came downstairs, A. immediately said, "bye-bye."

At our friends, he identified a piece of ice in a glass as "a:j" (ice).

He ushered people to the sofa and chairs, saying, "ti'taɪ" ('сідай' = sit [down]).

A. was seated on Cliff's lap, being fed a banana, and said, "banana."

He became fascinated and amused with rolling a ball down his arm.

He pointed to the tape deck and said, maɪ'sik" ('musique' = music), then pointed to the radio and said, "maɪ'sik" ('musique' = music).

26 months, 16 days. April 5

Day Care Accounts

Craig brought a helicopter in this morning. A. kept trying to take it from him, saying, "mine, mine." A. is very active and tends to be aggressive at times.

26 months, 17 days. April 6

Day Care Accounts

A. teased the children quite a bit this morning. Shawn had to go to the bathroom and said, "pee-pee." A. repeated, "pee-pee."

We took all the children outside to play, A. was so happy to go out.

When I got his coat, he said, "mine coat, mine coat." When we brought

him back indoors, he was not so happy; he cried, wanting to go back outside.

26 months, 18 days. April 7

Day Care Accounts

A. picked up a toy car off the floor and said, "oh mine car."

Derrick was bothering A.; A. looked at me and said, "make boy gone."

It seemed as if every time anyone went near A. today, he pushed them down.

26 months, 20 days. April 9

Mother's Accounts

Father was leaving; A. kissed him "bye-bye," and when father walked out the door, A. turned to me and said, "parti, papa" (gone away, daddy). He tried to blow up a balloon, but was unsuccessful, so I blew it up for him. He played with it for almost two hours.

We drove up to a car wash and A. became frightened at the sight of the mammoth apparatus. He calmed down when I explained what it was and the procedure involved. I believe that the familiar words " машина крутитъ-ся" (the machine turns) were the key to diminishing his fear.

26 months, 21 days. April 10

Mother's Accounts

We walked into church and A. immediately said, "my Бозя" (God).

He often said the following words today: "push"; "don't"; and "mu:'fer:" (move away). In my presence he referred to his tricycle as "e:'jo" ('velo' = bicycle).

He also said, "'i:jou " and "'i:jouz" for Cheerios.

He handed me a toy and said, for the first time, "here, go."

He gave me his socks and said, "'petkɪ" ('шкарпетки' = socks).

26 months, 22 days. April 11

Mother's Accounts

A. and I sat together and drew and colored. He repeated two, three, and four-word sentences after me. Every time he dropped his pencil, he exclaimed, "oh, олівець" (pencil), got off the chair, and retrieved it. (He has often attempted to repeat and sometimes say this word on his own initiative; but until today, the word was never pronounced correctly.)

For approximately two and a half weeks now, A. tells me he has soiled his diaper, "кака, sale" (kaka, dirty), holding his bottom with one hand. He now also often acceptingly goes with me to have his diaper changed. He still refuses to sit on the pot, however. Today, when he grabbed his bottom, and said to me, "кака" (kaka), and I questioningly began to approach him, he yelled, "кака, parti" (kaka, gone away), and ran off. I did, however, get him upstairs to be changed after explaining to him that, surely, he did not want to carry on with his activities with a load in his diaper.

He refused to take a bath, and said, "но купці" (bath). He insisted, instead, on "мий-мий (wash [up]), demanding, too, that he be left alone. He asked for "паста" (toothpaste), which I gave him, then motioned me to leave, saying, "go." He now appears to be less preoccupied with the taste of the toothpaste and eating it, and more occupied with actually

brushing his teeth.

To my great surprise, at bedtime A. asked me, " дай цьом" (give [me] a kiss). (A. has never asked for a kiss.)

26 months, 22 days. April 11

Day Care Accounts

Chrissy pushed A. down, and A. said, "Don't, Chissy." He bumped his head on the floor and attempted to say 'hurt', but pronounced it without the letter 'r'.

26 months, 23 days. April 12

Mother's Accounts

A. looked out the window and said, for the first time, "мокре" (wet). I told him, " Так, все мокре надворі бо дощ іде." (Yes, everything is wet outside because it is raining.). He repeated, "дощ іде" (it is raining).

I pointed at the clouds in the sky and said, " Дивися , там хмари в небі." (Look, there are clouds in the sky.). He repeated, " 'хмари небі" ('хмари'= clouds sky).

Just as I was ready to pour milk into his bowl of cereal, he emphatically said, "no, молочко" (milk). After a few spoonfuls of dry cereal, he demanded, "lait! lait!"(milk! milk!). I asked, " Ти хочеш молочко ?" (Do you want milk?); he answered, " хочеш молочко " (want milk).

When he finished eating, he said, "fini" (finished). I asked, " Ти скінчив ?" (Have you finished?); he answered, " скінчив " finished).

The three of us walked out the door: A. exclaimed, "oh, l'eau" (water); father said, "oui, l'eau" (yes, water); I said, "так, водички." (yes, water); A. again said, "l'eau" (water).

We walked into day care, and A. called, "Jimmy, Jimmy." He has become quite fond of Jimmy.

(We are aware that A. is repeating more and with greater accuracy, and that active vocabulary is on a rapid increase.)

A. ran into the house with father after day care, saying, for the first time, "'istətʃki 'istətʃki" ('їсточки' = eat).

I put him in his high-chair, and he jabbered away to himself. I was aware of new combinations of sounds in his streams of expressive jargon, as compared to those I have heard the past three weeks.

He asked me for "lait" (milk), "yogourt" (yogourt), "banane" (banana), and "соус" (sauce).

Each time I asked him if he wanted something, naming a particular food or item, he only answered with the one word "хочеш" (want), if he wanted it.

A. looked at the neighbor's new white car, excitedly pointed to it, and said, "ton-ton tʃif" ('Cliff' = Cliff). He may have associated the white color of the car with the white color of Cliff's van. Up till now, A. has only associated other vans (identical models) with Cliff's van.

26 months, 23 days. April 12

Day Care Accounts

A. talked alot today, but we could not understand what he was saying. The sun was shining on the carpet; A. would sit on the sunny spots and laugh, holding his hands over his eyes.

When we told the children it was lunch time, A. called, "soup time." I was busy and A. was trying to tell me something; he grabbed my leg and said, "hey, 'dorsi " (Dorothy).

26 months, 24 days. April 13

Mother's Accounts

A. followed me around this morning, being very obedient. He insisted on sitting in the chair next to me at the table for breakfast, patting the chair, and asking, "ti'tai" ('сідай ?' = sit [down]?).

Father came down for breakfast, bent down to give A. a kiss, but A. sought my undivided attention, not wishing father's interference. However, after father kissed me, and then bent down to A. for another try, A. permitted father to kiss him.

A. spoke to me predominantly in French this morning: words for food, drink, and articles of clothing. When we pulled up to day care, he said, "Jimmy." He waved to me from the window and blew me kisses as I drove away.

We were told by the women at day care, that shortly before the time we usually pick A. up, he insisted on going to the main room, and stood at the window watching for us. When we pulled up, A. gave us a big smile from the window and ran to the door to greet us. Before leaving day care A. approached his favorite people one by one and said, "bye

Jimmy," bye 'dɔrsi"(Dorothy), and "bye sa:ŋ" (Shaun).

A. did not appear to be very hungry at supper. He insisted on sitting at the table with us. He looked at his steaming plate of food, and said, "то halatʃɛ" (that's 'горяче'= hot), then after me repeated, "то горяче" (that's hot). I blew on his food and he blew on his food, and when it was cooled, he began to eat. Suddenly I saw him spit his food out; he caught me looking at him from the corner of his eye and said, " то горяче " (that's hot).

I gazed at him with a questioning look, and he began to roar with laughter. He pushed his plate to the center of the table, took his bib off, said, "fini" (finished), and ran off to ride his tricycle around the house; but kept running back at short intervals to swallow a bite or two. He must have been somewhat hungry, afterall. Perhaps he was making up for time lost at play this afternoon; he had a long nap at day care.

26 months, 24 days. April 13

Day Care Accounts

I asked A. where Rhonda was; he ran to the door, opened it, and called, "'mandə ."

He also said, "Andew," for 'Andrew.'

He was very happy today and played well with the other children.

A. discovered how to spit. He was sitting on the floor beside Craig, and spit on his hair. I scolded him, and he hung down his head. I told him to say sorry to Craig; he said, "sorry," and patted Craig on the leg.

26 months, 25 days. April 14

Mother's Accounts

A. stayed close to me again this morning; he was also rather cool towards father again.

While being dressed by father, A. ran to his closet and took out his brown shoes, insisting that he wear this particular pair today, "les souliers là" (the shoes there). (This is the first time A. has given preference to any particular article of clothing or footwear.) While dressing with father, A.'s vocabulary for clothing was only in French. While in the kitchen with me for breakfast, A. spoke mostly French and some Ukrainian.

A. kissed me goodbye in the car. Father walked A. to the day care door. When they reached the door, A. suddenly turned around and ran frantically back to the car. I opened the door, and he gave me another kiss. After father and A. walked into the center and up the first few stairs, A. turned around, walked back down the stairs, and up on his toes tried to reach the doorknob, in order to close the door which father had neglected to close behind them. Father assisted. A. is always closing doors and cupboards, and leaving things in place as neatly as were initially found. We were driving to Kathy and Cliff's. We had not told A. where we were driving to. Half way to our destination, A. recognized the route; he became very excited and began shouting, "ton-ton tʃif" (uncle 'Cliff'). He also imitated Cliff's hand movements by swinging his arms in the particular manner, and recalled Cliff's most prominent words, "oh, boy - oh, boy." No one was home when we arrived. A. turned to us and responded with, "ton-ton tʃif hema " (uncle 'Cliff' is not here). He

then repeated after me, "ton-ton tʃif нема вдома" (uncle "Cliff" is not at home).

In the car on the way home, A., on his own initiative said, "ton-ton tʃif нема вдома" (uncle 'Cliff' is not at home), several times.

Then to our amazement, he began naming other uncles: "ton-ton Jules"; "ton-ton Joseph"; "ton-ton i'dɛl" (Michel); "ton-ton sa" (François).

(Father often points to and names these uncles in photographs we have at home. A. repeats the names after father, and sometimes attempts to name these uncles on his own initiative. They are uncles he has not met; but he has been told twice in the past week that he will meet them soon.)

26 months, 25 days. April 14

Day Care Accounts

When A. arrived this morning, the children were having juice and crackers. He sat down on the floor and said, "kus'piz" (excuse [me] please). We put A. to bed for his nap. He was lying down while we were in the room, but when we stepped out, he got up; then when he heard us returning, he layed back down very quickly and pretended he was asleep. He never did sleep this afternoon.

26 months, 26 days. April 15

Mother's Accounts

A. heard an airplane overhead and said, "ə'mjõ," then "camion" (truck), then again, "ə'mjõ." (For 'truck' A. always says "camion" (truck). For 'airplane' he alternates between "ə'mjõ" and "camion" (truck).

It appears to be a trial-and-error attempt at correct procurement.

Perhaps: one, after two or three attempts he is satisfied one of the two words is correct; or two, after two or three attempts he gives up trying to procure the correct word because he knows we have understood the meaning he attempted to convey.)

He saw the clouds and said, "nuages." Father told him he was correct, and that the plane was flying through the clouds. Then A. pointed to the sky and said, "chaud, chaud" (hot). (This is the first time A. associated heat with clouds; perhaps he associated the clouds with steam.)

While playing alone this evening, A. correctly pronounced several Ukrainian words ending in 'к' (k), which he previously pronounced with a final 'т' (t).

26 months, 27 days. April 16

Mother's Accounts

A. and I spent the day without father. In the morning A. spoke to me predominantly in French, some Ukrainian, and only a few words in English. While playing by himself and with children outside, he spoke mostly English, some French, and little Ukrainian.

I listened to A. play with his friend this afternoon. His friend is approximately the same age and speaks up to seven-word sentences. A. often tries to repeat after his friend; he repeats three or four of the six or seven words spoken by his friend. When A. tried to explain something to his friend, he streamed forth with expressive jargon, a mixture of incomprehensible utterances and words in English, French, and Ukrainian. His commands, however, were most comprehensible:

"get off my bike"; "get off"; "don't do that"; "don't push me!"

The questions he asked his friend were, "where you go?" and "what you 'duin?" (doing). (Language acquisition, especially English, has suddenly taken a leap forward in the past two to three weeks. One must certainly take into account that from the age of seven months, A. has been predominantly exposed to the English language.)

I was outside the entire time A. played with his friend. From time to time I exchanged a few words with A. His exchanges with me slowly shifted from predominantly French, next Ukrainian, little English, to predominantly Ukrainian, next English, little French. But after having forced him back indoors to eat, he spoke predominantly English (addressing me angrily), next Ukrainian, and little French. By evening, after having eaten and settled down to a home routine, he talked to me predominantly in Ukrainian, next French, and spoke more English than he had in the morning.

While playing alone A. speaks up to four-word English-only sentences. When mixing French, Ukrainian, and English (English being predominant), he speaks up to six-word sentences.

When the three of us are together, he tends to mix all three languages (French being predominant), speaking up to four-word sentences.

He also tends to mix all three languages when alone with either mother or father.

When mother is alone with A. for a long period of time, Ukrainian begins to emerge as dominant, and French vocabulary decreases.

With father alone, A.'s French not only increases quantitatively, but Ukrainian frequently drops off altogether.

26 months, 28 days. April 17

Mother's Accounts

The three of us were together all day; A. spoke to us in hybrid sentences: French predominant, next Ukrainian, little English.

Three word combinations that emerged today were: "baby sale мячик" (baby [has a]) dirty ball) and "там мячик, là" (there [is the] ball, there).

26 months, 29 days. April 18

Day Care Accounts

A. was playing in the little wagon. He fell out and began to cry.

I asked, "What happened." He replied, "me fell out of wagon," and went right back into the wagon.

We were playing 'Ring Around the Rosie': A. would sing, "husha, husha," and fall down in great laughter.

2 years, 3 months. April 20

Day Care Accounts

When A. came in this morning. He shot across the room and ran down the back steps, trying to get outside. I brought him back up the stairs; and when I tried to get his coat off, he cried and cried, pointing to the back door.

A. did not wet his diaper today. He does not tell us when he has to go, so we take him to the bathroom approximately every hour and a half. The children were playing with skipping ropes; A. took hold of each end of one and tried and tried unsuccessfully to get it over his head.

He jabbered and laughed all the while. All the other children were watching him; they began to laugh, too.

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